



PLAYA VISTA – LA’S URBAN MODEL

SUSTAINABILITY CASE STUDY

Location

Playa Vista, situated on LA’s Westside, is one of the most innovative urban infill developments in the country. Less than 2 miles from the beach and offering a short drive to Los Angeles International Airport (LAX), Playa Vista is also connected to some of the best bike paths in California. Located on land that formerly housed the headquarters of Howard Hughes’ aircraft company, the property is now a thriving and evolving mixed-use community. More than 15,000 people now live and work at Playa Vista, with another 5,000 expected in the next few years. Seventy percent of Playa Vista’s original design and land area is designated as parks and open space, and the community features modern sustainable development throughout, leading to its recognition by the Los Angeles Times as “LA’s Urban Model.” Playa Vista has also become an example for urban planners throughout the world who are looking to observe innovative sustainable policies in action.



Community Design – Forward-Thinking and Game-Changing

MIXED-USE SUSTAINABILITY

Today Playa Vista encompasses 460 acres on the coveted Westside of Los Angeles, near the Pacific Ocean, airport and just a few hours drive from the mountains. The balanced community features over 6000 homes, approximately 3 million sq. ft. of creative offices, over 200,000 sq. ft. of retail spaces and community-serving facilities including a public library, fire station, elementary school and two resident recreation clubs, blended with abundant parks and open space to provide a varied mix of luxury and affordable for sale and rental housing near work centers throughout the Westside. Playa Vista is also recognized as a leader in sustainable development, with innovative smart growth neighborhoods that feature environmental, energy and water-saving measures. Additionally, 92% of the materials recovered from the decommissioning of the former Hughes Aircraft plant were recycled as new roadbeds and other building materials for Playa Vista



LIVING IN PLAYA VISTA

Playa Vista was thoughtfully designed to provide a breadth and depth of housing to meet a variety of lifestyles and budgets and allow residents to be much closer to their places of employment. Residential neighborhoods range from apartments, condominiums, townhomes and lofts to detached or single-family style homes. The community also provides true affordable housing. 15 percent of all rental units at Playa Vista are affordable units for households with very low, low and middle incomes. Controlled Price Units (CPUs) are for-sale units sold at “capped” prices with priority given to community serving employees, including firefighters, teachers and police officers. First-time homebuyers and modest-income families who work within or nearby Playa Vista will account for 10 percent of the for-sale neighborhoods.

THE CAMPUS – CREATING JOBS NEAR HOUSING

To address the 3 to 1 jobs to housing imbalance on the Westside of Los Angeles, The Campus at Playa Vista brings approximately 3 million sq. ft. of creative office space as the next-door neighbor to Playa Vista’s 6,000 plus residences. The Campus is home to tech and creative powerhouses, including Yahoo, Google, YouTube Space LA, The Honest Company and Fox Sports, among others. The creative offices are situated in the eastern portion of Playa Vista and oriented around Campus Central Park, which features berm gardens, water areas, walking paths, a bandshell for outdoor events and more—offering employees and Playa Vista residents plenty of opportunities to embrace the outdoor work and lifestyle. These well-located offices also make it convenient for those who live at Playa Vista to sustainably commute to work on foot, via bike or daily shuttle.



LEED CERTIFICATION FOR HOMES AND OFFICES

Leadership in Energy and Environmental Design (LEED) is one of the most popular green building certification programs in the world. Many of Playa Vista's newest homes and creative offices as well as the Playa Vista branch of the Los Angeles Fire Department are LEED-certified, meaning they meet the standards set for the design, construction, operation and maintenance of green neighborhoods.

Prior to LEED, homes in Playa Vista were built according to the Residential Sustainable Performance Guidelines released in 1998 while LEED was still in the pilot stage, and they acted as a forerunner to LEED. The guidelines focused on the core areas of water and energy efficiency, indoor air quality, waste minimization, rainwater capture and filtering and construction waste recycling.



RUNWAY, A NEW LIFESTYLE HUB

At the heart of Playa Vista is Runway, the Westside's newest lifestyle hub, which is home to exciting new retailers and restaurants like Whole Foods, Cinemark, Hopdoddy Burger Bar, ROC Kitchen, 800 Degrees, Panini Cafe, Lyfe Kitchen, SOL Cocina, Hal's Bar & Grill, Urban Plates, Flywheel Sports, The Studio MDR and more. The Playa Vista Farmers' Market is here every Saturday. With all this a short walk away, residents and employees don't need to get in the car as often and travel outside of the community to get what they need. Offering a Farmers' Market to the community and surrounding areas not only gives shoppers an opportunity to support local businesses but also ensures that the produce isn't traveling as much, thereby reducing the carbon footprint.

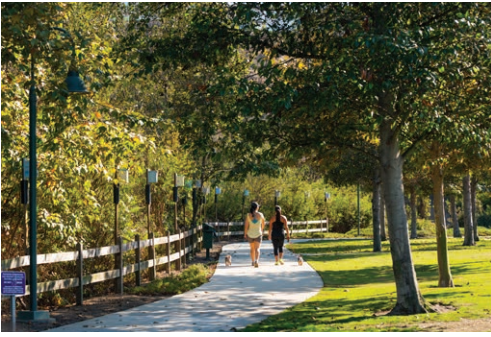
29 URBAN PARKS AND COMMUNITY GARDENS

Playa Vista has an unmatched network of parks, open space areas and recreational opportunities. There are over 115 acres of open space and 157 acres of parks. The community features 29 parks, all open to the public, but privately maintained. By design, all of the homes in Playa Vista are only a two- to five-minute walk to at least one of the community parks. As a result, there's likely to be more parks per acre in Playa Vista than in most cities in Southern California.

In doing its part to be a water-friendly community, all Playa Vista parks are irrigated by city-supplied recycled water and implement a smart irrigation controller system.

Playa Vista residents are even able to grow their own fresh flowers, fruits and vegetables year-round at Celdon Gardens and Corner Greens, which both feature community garden plots available on a reservation basis. Corner Greens also features an outdoor kitchen with seating to prep and then dine on those farm-to-table meals.





RIPARIAN CORRIDOR AND WETLANDS

As part of its commitment to the environment, Playa Vista designed and built a 51-acre Freshwater Wetlands system consisting of a 25-acre Riparian Corridor and a 26-acre Freshwater Marsh to naturally treat storm water before it enters the Ballona Wetlands and Santa Monica Bay. The system collects storm water runoff from 442 acres of upstream portions of Playa Vista as well as 614 acres off-site within the watershed. Playa Vista's wetland and marsh system replicates natural filtering techniques. Plant materials in the system aid in slowing water flow and act like a sponge by catching sediments with attached pollutants.

Because of Playa Vista's efforts to create this model natural system, runoff traveling through the Riparian Corridor and Freshwater Marsh is cleansed before arriving in the Ballona Wetlands or Santa Monica Bay. This system now serves as one of the most significant and successful natural storm water treatments ever created in an urban area in the U.S.

The Freshwater Marsh and Riparian Corridor offer natural storm water treatment and protect local streets, businesses and neighborhoods from flooding. The corridor and marsh also provide new habitats for birds and other wildlife, which are regularly surveyed and monitored for health, growth and population changes. Water quality tests have consistently shown that the Freshwater Marsh is exceeding performance expectations for pollutant removal.

Environmentally Friendly Recreation at The Resort

Recreation at Playa Vista was also designed with sustainability in mind. The Resort is an innovative resident activity club featuring a two-level state of the art fitness center with indoor/outdoor spaces, expansive pool area with cabanas, deck with outdoor fireplace, catering kitchen and chef-inspired demonstration kitchen and more.



PARTNERSHIP WITH SOCAL GAS COMPANY EMERGING TECHNOLOGIES PROGRAM

Playa Vista forged a unique partnership with Southern California's Gas Company Emerging Technologies Program for The Resort. As a part of this program, The Resort utilizes a Combined Heat and Power (CHP) cogeneration system from Tecogen, which recovers heat that is normally wasted in conventional power generation and turns it into useful energy. The "waste" heat is then used to offset fuel that would have to be burned in the site's water heaters and boilers. The captured "waste" heat is used for The Resort's swimming pools, which reduces greenhouse gas emissions normally associated with electricity and hot water production by as much as 50 percent.



PHOTOVOLTAIC SOLAR ELECTRIC SYSTEM

Photovoltaic solar electric systems generate electricity directly from sunlight thanks to an electronic process that occurs naturally in certain types of materials called semiconductors. The Resort's system features 251 Kyocera solar modules, which have a system capacity of 62.50 kW of direct current (DC). The system also includes the Solectria PVI 60KW—a fully customizable line of commercial grid-tied PV inverters which turn the direct current output of a solar panel into current that can be fed into a commercial energy grid.



ENERGY EFFICIENCIES

LED lights, which have a longer lifespan and are more energy efficient than incandescent lights, are installed throughout The Resort. Additionally, The Resort's lobby and gym feature passive cooling—a building design approach that concentrates on heat gain control and heat dissipation in a building that improves temperature comfort indoors with little to no energy consumption. Interior courtyards aid passive cooling by pulling air through the building, while the building's "cool roof" reflects the sun's heat in two ways: through a green (planted) roof—which also slows and filters rainwater—and a white reflective roof.



WATER EFFICIENCY

Doing its part to conserve water, The Resort features low-flow, high-performance bathroom fixtures. The bathrooms boast 0.5 GPM (gallons per minute) faucets, 1.2 GPF (gallons per flush) toilets, 0.125 GPF urinals and 1.25 GPM showerheads—all well below the California Plumbing Code regulations. City-supplied recycled water is used for irrigation of in-ground plants, which are watered using a smart irrigation controller system.



Public School, Fire Station and Library in the Community

Playa Vista's residents have several of the civic-serving institutions they need at their fingertips. Playa Vista has invested millions of dollars and donated acres of land for public facilities that serve not only community residents and workers but also those of neighboring communities.

Through a partnership with nearby Loyola Marymount University, the Los Angeles Unified School District and the local community, Playa Vista Elementary School (PVES), located in the community, has become a breeding ground for effective teaching strategies. A middle school pathway close to Playa Vista, which will serve students from PVES as well as surrounding areas, opens in the fall of 2017.

Playa Vista donated land for Playa Vista Elementary School, as well the Playa Vista Branch of the Los Angeles Public Library. As community developer, Playa Vista also constructed a \$6.5 million state-of-the-art LEED-certified fire station for the Los Angeles City Fire Department. Station No. 67 has served Playa Vista since it opened in 2008 and also participates in rescue services and firefighting in several Westside locations.

With the school, library and fire station walking and biking distance from all homes, you never have to go far to get where you need to go.

Walkability and Alternative Transportation

Playa Vista was designed with walkability in mind. With a mix of office space and residential options, employees who work at The Campus have the opportunity to live and work in Playa Vista. All throughout Playa Vista are wide sidewalks, urban parks, water fountains for dogs and benches. Plus, Runway, The Resort, The CenterPointe Club, Playa Vista Elementary School, the library and more are just a stroll away.





Committing more than \$125 million to local transportation improvements benefitting the entire Westside, Playa Vista has helped improve intersection and street segments to significantly ease the flow of local traffic. Two new bus lines and enhanced bus service funded by Playa Vista have increased public transportation options, and a low-emission daily shuttle system allows

residents to travel throughout Playa Vista to nearby entertainment, employment and transportation centers.



The clean-fuel, free Playa Vista Daily Shuttle and Beach Shuttles run year-round and take riders around Playa Vista and to other Westside hot spots. Since 2005, the Playa Vista Beach Shuttle has made it easier for residents to leave their cars at home and reduce their impact on the environment. Operating every Friday through Sunday, the bus route begins in Playa Vista and makes stops at the beach in Venice and at various locations throughout the Marina, including Fisherman's Village. The shuttle also connects with the Marina del Rey WaterBus during the summer, providing weekend boat transportation to six boarding locations throughout the Marina.

To save time when using the shuttles, TransLoc is a valuable tool that helps you get around. It provides instant access to real-time information on when your bus or shuttle is expected to arrive so you can plan your day more easily. Get started on PlayaVista.TransLoc.com or download the free TransLoc Rider app from Google Play for Android devices or the App Store for Apple devices. TransLoc offers same-day on-demand service through their app.

ENVIRONMENTAL AWARDS

PATH (Partnership for Advancing Technology in Housing)

Playa Vista was developed as one of six communities in the country selected by President Bill Clinton during his time in office as National Pilot Projects of the Partnership for Advancing Technology in Housing (PATH). PATH's goals are to improve the development, dissemination and use of new housing technologies.

Ahwahnee Award

Playa Vista was recognized as a model of livable, pedestrian- and transit-friendly communities and was among eight projects to receive a 1999 Ahwahnee Award from the Local Government Commission—a Sacramento-based nonprofit group that studies cities.

EPA's Energy Star Clean Air Awards

Playa Vista received an Energy Star Clean Air Award in 2001 from the U.S. Environmental Protection Agency (EPA) and the Department of Energy (DOE). The award honors organizations that have made outstanding contributions to protecting the environment through energy efficiency. Playa Vista received the award because it offers residents the ability to manage their household needs without getting into their cars.





US Green Building Council – LA Chapter’s Sustainable Innovation Awards

Playa Vista received two awards at the 6th annual Sustainable Innovative Awards, including Excellence in Water Conservation and Innovation in Design—both for The Resort at Playa Vista.

California Stormwater Quality Association – Stormwater Best Management Practices Implementation Project of the Year

Playa Vista was honored by the California Stormwater Quality Association with the 2006 Outstanding Stormwater Best Management Practice Implementation Project Award for its Freshwater Marsh, which reduced pollutants to the Ballona Wetlands, the Ballona Channel and Santa Monica Bay.



2014 Gold Nugget – Best On the Boards Site Plan

Brookfield Residential received a top Gold Nugget award for “exceptional concepts in design, planning and development” for Playa Vista in its Phase II community plan, which the judges applauded for its “ambitiousness, cohesion and clear intention of a knit-together neighborhood.”

BROOKFIELD RESIDENTIAL

Brookfield Residential Southern California, a division of Brookfield Residential, is committed to being more than a homebuilder. We strive to create the best places to call home. The Brookfield Residential Southern California team has the passion, the expertise and the local knowledge to craft homes and neighborhoods that speak to homebuyers at every stage of life. We are an award-winning homebuilder and industry leader with an exceptional reputation for quality, design and customer service.

Brookfield Residential Properties Inc. is a leading land developer and homebuilder in North America. We entitle and develop land to create master-planned communities, sell lots to third-party builders and operate our own homebuilding division. We also participate in select strategic real estate opportunities, including infill projects, mixed-use developments and joint ventures.

Please visit BrookfieldSoCal.com, BrookfieldResidential.com and PlayaVista.com for more information.