

HOW THE WEST WAS WON IN PHOENIX

Taking a deeper look at the hot Arizona data center market

By Jeff Tench, President, North America, Vantage Data Centers

Phoenix is one of the hottest cities in the United States, not just temperature-wise, but also in terms of data center growth. The city that averages 106 degrees Fahrenheit in July is also home to some of the largest data centers in the country, and the pace of construction in the Phoenix metro area continues to increase. In 2021, Phoenix was home to 86MW of data center construction, behind only Northern California, Northern Virginia, and the Northwest—making it a Tier 1, top five market.

The reasoning behind Phoenix as a desirable option for data centers may not be readily apparent if one only looks at the area’s climate. All those servers, racks, and other equipment need to be housed in cool temperatures—ideally under 80 degrees Fahrenheit.

But while the Phoenix area presents some challenges from its climate, it more than makes up for it in other areas. Phoenix is the fastest-growing city in the United States, which has led to it being listed as one of the nation’s top areas for technology talent. The cost of energy in Arizona is relatively low, yet the state offers attractive tax incentives. Meanwhile, Phoenix and nearby suburbs, including Goodyear, Mesa, and Chandler, feature numerous connectivity options and widely available land.

Let’s take a closer look at these and other factors that are making the Phoenix area a great alternative to Silicon Valley and some of the other well-established locations in the Western U.S.

Wide Open Spaces and Plenty of Incentives

The state of Arizona offers significant tax benefits to attract data center operators and end-users. For example, the Arizona Commerce Authority’s Computer Data Center Program outlines a number of tax exemptions good for ten calendar years (20 years for data centers that qualify as Sustainable Redevelopment Projects). The state reinforced its tax incentive program for data centers in 2021 with new legislation that extends tax breaks through 2033.

This favorable business climate has attracted some of the largest companies in the world, making Phoenix and its surrounding environs budding technology hubs. Google, Microsoft, Amazon, and others have either developed or are planning on developing their own hyperscale data centers based in the state.

Most of the growth that’s taking place is happening in Goodyear, Mesa, and Chandler. The cities are no more than 22.5 miles from Phoenix, with Goodyear just west of Phoenix and Mesa and Chandler to the east.

Yet despite being near a city of more than 1.5 million people, each of these cities offers large amounts of available land. For example, the City of Mesa’s Office of Economic Development touts “more than 1,000 acres of shovel-ready sites—perfectly suited for a data center operation.”

This puts these exurban locations in direct contrast to other regions like Silicon Valley and the Pacific Northwest, where large tracts of land



A rendering of Vantage Data Centers’ first data center in Goodyear, Arizona, that will open in the summer of 2022.

are more difficult to find and can be accompanied by increased disaster risks. These other regions are also more expensive to build on, which makes the cities near Phoenix ideal locations for companies seeking financial benefits and the option to scale as needed.

As hyperscalers and cloud providers take advantage of the metro Phoenix area as a good alternative to other more expensive West Coast locations, many will create their own availability zones. This will spawn a domino effect on-demand as they expand in the region to fill out their zonal approach to the market.

Valley of the Sun and Environmental Impact

The Phoenix skyline is backdropped by gorgeous mountain ranges and desert landscapes that juxtapose with the city's enormous skyscrapers. It's a visual reminder that, despite its growth as a business and technology center, the city is still beholden to the natural beauty that surrounds it.

It's incumbent upon data center operators and utility providers to do their part to preserve that beauty. That involves committing to renewable energy in its different forms. Indeed, as real estate company JLL notes, Arizona's Renewable Environmental Standard requires 15 percent of the state's electricity consumed in 2025 to be derived from renewable energy sources.

One of those primary sources is sunlight. Arizona ranks among the top states in the country for solar generation, and Phoenix's abundance of sunny days help provide a consistent supply of clean, renewable solar energy at a low cost.

Contrary to popular thinking, Phoenix has a steady supply of water due to solid resource management. However, given the propensity for drought in the region, it's important for data center operators to take extra steps toward water conservation. Many communities around Phoenix, including those home to data centers, have experienced droughts in recent

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Vantage Data Centers' 160MW data center campus sits on 50 acres and will include more than one million square feet once fully developed.

VANTAGE'S NEW PHOENIX-BASED CAMPUS IS A STATEMENT OF THE POWER AND POTENTIAL OF THE PHOENIX MARKET

When Vantage Data Centers began exploring a location for a new campus in the Western United States, Phoenix rose to the top of the list. In addition to offering all the features listed in this article, the region would provide Vantage with a chance to expand its western presence and offer customers a great alternative to its already-existing campuses in Washington state and Santa Clara, California.

In late 2021, Vantage formally announced the topping out of the first data center on its Goodyear campus, which will offer 32MW of critical IT capacity. Located on 50 acres in Goodyear's "Bullard Tech Corridor," the campus will ultimately house three data centers and 1 million square feet once fully developed. It will be one of Vantage's largest North American campuses when fully developed at 160MW. It is scheduled to open this summer.

The first data center will offer all the innovations that Vantage's facilities are known for. It will feature a highly modularized electric equipment design for maximum efficiency and reliability. A closed-loop, chilled water system will ensure reduced water usage and sustainable operations, while air-side economizers will help reduce compressor energy usage. Multiple connectivity options will provide customers with access to both dark and lit fiber. Latency to 120 Buren Street is less than one millisecond round trip.

The size and scope of Vantage's Goodyear campus speak to the power and potential the company sees in the Phoenix market. The area offers plentiful land for future expansion, low energy costs, a host of carriers, and more—all extremely valuable benefits to Vantage's customers of hyperscalers and cloud providers who encouraged Vantage to make the Phoenix area its newest home.

years. If data center operators expect to succeed in the region, they must minimize water consumption as much as possible. Closed-loop, chilled water systems that use little water while leveraging outside ambient air temperature to reduce compressor energy should be the default option.

Respecting Arizona's natural resources doesn't just benefit the environment—it also helps keep the state's already low energy costs down. According to the U.S. Energy Information Administration, the cost for industrial energy in Arizona was 6.50 cents/kilowatt-hour. That's significantly less than California (13.83) and below the U.S. average of 7.30, marking another attractive benefit for data centers and their customers.

High Demand and Continued Growth

Finally, Phoenix features a myriad of connectivity options that would be the envy of many markets. The area is home

to many fiber and dark fiber providers, including CenturyLink, Sprint, Electric Lightwave/Integra, and others.

The telecommunications providers have gone where the demand is and will be for some time. In addition to the big players already mentioned, other major cloud providers are actively exploring setting up shop in the Phoenix market. These aren't organizations that are looking to sign short-term data center leases; they're hyperscale cloud providers that typically have multi-year leases, sometimes up to ten years or longer. Their long-term commitment to the region is helping to create jobs and attracting even more people to the Phoenix area.

All these factors are coming together to create a technology-driven gold rush that promises to make Phoenix a viable alternative to other western locations—and keep the desert hotspot growing for years to come. ☺



About The Author

Jeff Tench oversees the company's business in the U.S. and Canada as the president of Vantage Data Centers in North America. Tench is responsible for accelerating Vantage's growth with overall P&L responsibility. With more than 25 years of experience in the technology, telecommunications, and IT services industries, he is a dynamic leader with a track record of growing global companies both organically and via acquisitions.

Prior to joining Vantage, Tench was the global head of the Microsoft Business Group at Cognizant. Before Cognizant, he founded and served as CEO of New Signature, a company acquired by Cognizant, where he raised private equity funding to create the world's largest independent pure-play Microsoft cloud partner. Under his leadership, the company acquired eight companies over five years, expanding the company's footprint from a regional presence in Washington, D.C. to five countries operating across four continents, all while driving 30 percent topline growth. Tench also served as CEO at Tellris after an 11-year career at Level 3 Communications where he held multiple leadership roles, including president of the Business Markets Group.