Keep Data Cool With Underground Sites

When selecting a data center for your customers, consider the benefits of underground sites.

By Christopher Chung, CEO, Missouri Partnership

The Farmers' Almanac predicts a hot, dry summer for much of the Midwest this year. As the mercury rises, so will the costs of cooling data centers in the summer months. To beat the heat, companies are considering underground storage sites for their data storage needs. In addition to being energy efficient, underground sites offer enhanced security, protection from natural disasters, and plenty of room to grow. While these factors are important to all business sectors, they are absolutely critical in the management and storage of D.A.T.A.:

Disaster Defense

Underground sites are ideal locations for data centers and disaster recovery. Storing data deep in the earth means decreased vulnerability to natural and man-made disasters. Tornadoes, hurricanes, and earthquakes, which can cripple above-ground businesses, are less of a threat to operations located underneath the ground. Because they are protected by a layer of solid rock, underground storage sites guarantee companies little or no loss of data during emergencies.

Always Cool

Keeping data centers cool is critical for business operations. Without the blazing sun to heat up buildings during the day, underground sites offer natural climate control. In the Midwest, most caves and underground sites maintain constant temperatures of 50 to 65 degrees, with more control over humidity and air quality than above-ground sites. Lower cooling costs offer even greater savings on Missouri's already-low utility rates. Missouri has the 11th lowest commercial electricity costs in the U.S. at 8.04 cents/kWh and the 12th lowest industrial electricity costs at 5.95 cents/kWh.

Tight Security

Security is a top priority for companies that store and manage confidential data. Underground sites offer enhanced security and control over physical access to data centers. Unlike traditional buildings, underground sites have limited entrances and no windows — giving companies assurance that data is safe and secure.

Ample Room To Grow

Data centers need expansive space. In metropolitan areas where many businesses are headquartered, space is at a pre-mium. Underground sites offer plenty of room to expand at competitive prices.

Missouri has more than 6,000 caves and more than 15 million square feet of underground warehouse space available for data centers. Rental prices for these sites tend to be less expensive than their above-ground counterparts. But build-out for underground data centers is also less expensive, because the natural foundation, walls, and ceilings are already in place.

Underground facilities are available around the state in both metropolitan and rural areas. Several cities in Missouri including Springfield and Kansas City are home to caves and underground sites — even the City of St. Louis has nearly 30 caves.

Explore Missouri's Underground Sites

With an established information technology infrastructure already in place, relocating a data center or disaster recovery center to Missouri's underground spaces won't break the bank. Along with more than two million high-speed lines and nearly 1,000 telephone, cable, and wireless communication companies serving as providers, suppliers, and contractors, Missouri companies are in a good spot for quick exchange of data.

Low business costs and a large talent pool make Missouri a prime location for data centers. In 2011, KLG named St. Louis and Kansas City two of the top markets for IT talent in the U.S. Colleges and universities around the state are adding to the talent pool with 10 institutions offering a Bachelor's degree or higher in electrical or computer engineering. Thirty-four colleges or universities across the state also offer a Bachelor's degree or higher in computer science. And Missouri's talent is less expensive than that of other states. In 2011, CNBC ranked the state of Missouri 3rd in the U.S. for low business costs, including the cost of labor. Businesses in the state also enjoy significantly lower taxes than other states, including neighboring Iowa, Illinois, and Nebraska.

Many companies have already chosen Missouri for their data centers. In Springfield, SpringNet Data Center operates an 80,000 square foot underground facility. North of there in Kansas City, SubTech Data Center is using millions of square feet in SubTropolis for data and IT storage.

With better security, protection from natural disasters, low-cost utilities, and a wealth of room for growth, taking data underground is a smart move for any company. ●

CHRISTOPHER CHUNG

MISSOURI
[real people, real opportunity]

Christopher Chung is the CEO of Missouri Partnership, a nonprofit economic development organization that works together with other economic development organizations to attract new companies and help advance Missouri's standing as an industrial leader.