

Down South

BY ROB KINCHLER, P.E.

The South Central United States: Manufacturing a smart and healthy construction market.

FROM DEEP IN THE HEART OF TEXAS to the Bluegrass State's finish line at Churchill Downs (that's Louisville), the South never experienced the uncontrollable growth that benefited and now plagues other parts of the country. Over the past 10 years population growth in AISC's South Central region has been steady, fueled by northern migration south as well as immigration. This is not to say the region hasn't scaled back construction activity recently, but the downshift hasn't been as dramatic as in other parts of the country.

The South Central region, like all others, has pockets that prefer steel and pockets that don't. Much of this is based on regional preference due to comfort (working with one material over another) and infrastructure (how established a material is in the area). Steel fabrication, detailing, and erection infrastructure is very strong in Alabama and Texas.

Strong Markets

Health-care, education, and industrial are the current active and influential markets in the region. This bodes well for the steel industry, as we tend to do well in these markets. The steel market share in the region continues to climb rising by 7 points over the past 5 years. The large increase in market share may be due to the shift in the types of construction projects currently being built, but however you slice it the relative use of structural steel is increasing in the region.

The non-residential and multi-story residential building construction market in the region is currently running at an annual rate of 140 million sq. ft, down from 240 million sq. ft last year. School construction is currently the dominant market for the region, as 32% of all construction projects moving forward in the market are education-related. However, the industrial market should start to increase significantly in the coming months. Several industrial facilities are in the design phase throughout the region, particularly in the power industry. There are also heavy machinery plants, battery plants, steel plants, aircraft plants, solar plants, auto manufacturing facilities, and petroleum refineries scheduled for design and construction—even in this economy.

Elementary and secondary schools are being built all across the region and are keeping many fabricators busy. Alabama and Texas lead the region in new school construction, while Louisville, Ky. just passed a bond to allow for the construction of several new schools. In addition, Arkansas recently received \$340 million dollars of stimulus money for school construc-

tion, and Louisiana's Central School District in Baton Rouge just passed a \$55 million tax increase for school renovation and construction.

College and university construction also forges ahead. The University of Texas at Austin is currently spending \$1 billion on construction projects. Some of these are being constructed now and many more projects are in the planning stages. Also in the area, Austin Community College is currently spending \$200 million on a new campus in Round Rock.

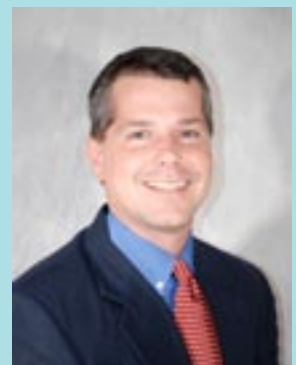
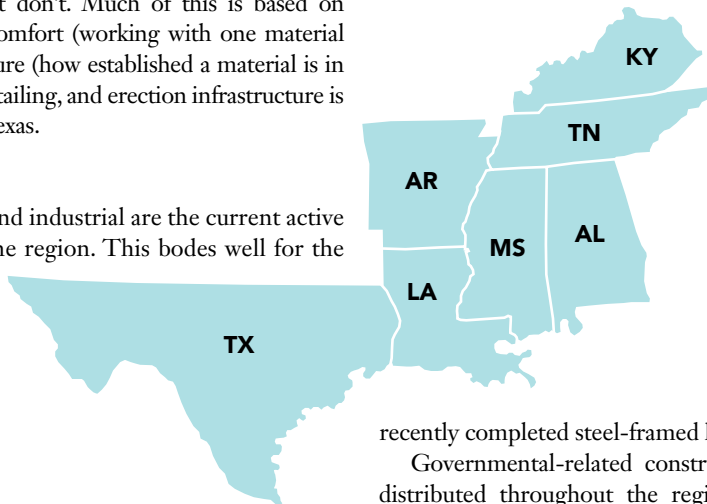
Health-care remains strong, with several new steel-framed hospitals recently completed or under construction in the region and several others slated to start. Hillcrest Baptist Medical Center in Waco, Texas; Our Lady of the Lourdes in Shreveport, La.; The Baptist West Hospital in Jackson, Miss.; Norton Healthcare in Louisville; and the Women's Hospital in Baton Rouge, La. are just a few examples of recently completed steel-framed hospitals.

Governmental-related construction remains steady and is distributed throughout the region. New convention centers for Louisville and Nashville are being developed. BRAC (Base Realignment and Closure Act) work at military bases in the region is moving forward at Ft. Campbell in Ky.; Redstone Arsenal in Huntsville, Ala.; Ft. Bliss in El Paso, Texas; and Ft. Sam Houston in San Antonio.

Everything's Bigger in Texas

It's safe to say that the region is dominated by Texas. The Lone Star State makes up well over 50% of the construction market in the region and is currently the largest construction market in the U.S., with 11.5% of the total recently passing both Florida and California. Other hot construction spots in the region include northwest Arkansas, Nashville, and Huntsville, Ala.

Texas continues to build thanks to its population growth, proximity to the coast, and petro-



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leum and medical industries. Houston, the largest city in the state and region and fourth largest city in the United States, leads the way, as it hosts a huge petroleum industry and is a major U.S. port. In addition, the city's Texas Medical Center is a hotbed of research and patient care. The Medical Center's "central business district" of skyscrapers rivals that of many other U.S. cities' downtown skylines.

Austin is a dynamic city, with the University of Texas leading the construction parade. Austin's motto is "Keep Austin weird." And it certainly is unusual in the current economic climate. You wouldn't know there was a slowdown in this city; construction continues at a breakneck pace. There are still many condominium developers trying to move forward with new residential projects. They believe the demand is there, just not the financing. Austin is redeveloping its riverfront, building its educational infrastructure, and starting new solar plants. This is a high-tech, vibrant city.

While Texas has a strong construction market, it also has a strong concrete industry. This is one of the challenges the structural steel industry faces in promoting the use of steel. Thankfully, Texas also has a strong steel fabrication infrastructure, which can be mobilized to educate the community on how steel construction brings an as-yet-to-be-considered enhanced value to a project.

Northwest Arkansas is home to three Fortune 500 companies: Wal-Mart, J.B. Hunt, and Tyson. It is also home to the University of Arkansas. The towns of Springdale, Rogers, Bentonville, and Fayetteville have experienced large population growth over the last decade and continue to build to meet the needs of the community, as well as these large companies.

In Tennessee, Nashville is home to Hospital Corporation of America and Community Health Systems, the largest health-care providers in the United States, which build and operate hospitals all over the country—and they're currently working on building several more. Nashville's Vanderbilt University is also planning significant construction with its medical center and other areas of the university. The hot spots in town consist of Cool Springs (a mixed-use commercial/residential/office development south

of town), the West End, and downtown. There are also still several residential developments on board that could be released for construction soon, and AISC has been making an effort to switch some of these projects from concrete to steel. The big-ticket item planned for Nashville is the new convention center.

In Alabama, Huntsville is heavily invested in aerospace, defense, biotechnology, and technology in general and has a very large technical/engineering workforce. More than 4,000 jobs are coming to the region as a result of BRAC, which is spurring development in and around Huntsville. In addition, the area's Cummings Research Park has several large office and technology projects planned.

What is AISC doing?

Sometimes, owners/developers are not even presented with a steel alternative. Whether steel brings a cost and/or time savings to the project cannot be determined unless it is given consideration from the beginning and an accurate estimate developed. AISC's regional engineers work with the AISC Steel Solutions Center—our in-house technical and conceptual solution assistance center—to help engineers find solutions that are beneficial to a project. We have assisted with multi-story residential, parking, office, and other project types. In my experience, the majority of the conceptual studies we provide clearly demonstrate the viability and economic benefits of using structural steel as compared to framing systems using other materials.

Typically if a comparison is made between steel and another material, it is only based on a typical bay and considers only the fabricated/erected price of steel including fire protection if required. But the benefits of steel construction extend far beyond the steel package price itself. Using steel on a project can bring significant savings in foundations, general conditions, cladding and curtain walls, equipment rental, and operational costs, as well as lower floor-to-floor heights and LEED credits.

We also help the project team find ways to get the steel delivered to the site as soon as the foundations are ready to accept them, employing resources such as service centers, early involvement, and building information modeling (BIM).

Recently in my region, I have been encouraging fabricators, service centers, and mills to become active in both AISC and their local fabrication associations. The idea is for the industry to better support one another, get better educated, and have a common message to present to the design community and to the project owners. I am also working on getting our industry to develop relationships with the project team and to become more proactive in a project, so that the project team realizes the benefit steel fabricators, erectors, detailers, service centers, and mills can bring to a project early on.

As I roam around the region enjoying meat and threes (that's Southern for "your choice of meat and three sides"), Krispy Kreme doughnuts, sweet tea, and southern hospitality in general, feel free to call me, and we can discuss how steel can be the material of choice for your next project. To learn more about my future travels and to contact me directly, please visit me on the web at www.aisc.org/myregion or e-mail me at kinchler@aisc.org. MSC