GEOGRAPHY AFFECTS FREIGHT MOVEMENT IN UTAH

U.S . Highway 93 Mike O'Callaghan-Pat Tillman Memorial Bridge crosses 1,500 feet south of Hoover Dam and 900 feet above the Colorado River near Las Vegas, NV.

Union Pacific intermodal train crosses Keddie Wye trestle in California's Sierra Nevada Mountains.

WHY ARE SO MANY TRUCKS ON UTAH HIGHWAYS?

Geography is a major factor in the location of both highway and railroad freight routes in Utah and the west. Specifically, the Sierra Nevada Mountain Range in California and the Colorado River in southeastern Utah, determine both the location of, and freight flow on, many Utah freight corridors. Utah is the crossroads for freight traffic traveling to and from the east and west coasts on Interstates 15, 70, 80, and 84. Truck traffic is growing rapidly along these and other routes in the state. Freight traffic is 23 percent of total traffic on Utah's Highways, while nationally it averages only 12 percent.

SIERRA NEVADA MOUNTAIN RANGE

The Sierra Nevada Range is a 300-mile barrier to east-west truck and rail freight movement. The tallest mountain in the 48 contiguous states—14,495-foot Mount Whitney—is located near the southern end of the Sierra, and several national parks and monuments are also situated in this section. This extreme ruggedness and environmental sensitivity have precluded transportation corridors through the southern Sierra.

Located at each end of this critical segment, state Route 58, I-15 and I-80 are the only major east-west highways connecting Utah with California. The Union Pacific Railroad's three routes linking these states also circumvent the most rugged part of the Sierra.

COLORADO RIVER CANYONS

A major obstacle to north-south freight traffic in the west is the Colorado River. The canyons of the Colorado, including the famous Grand Canyon, extend from Grand Junction, CO, to Laughlin, NV. This rugged and impassable 723 mile segment is the longest geographical barrier to ground transportation in the lower 48 states.

Expansive national parks, recreation areas, and man-made reservoirs also limit ground mobility across this region. There are only three major truck routes, U.S. Highway 89 at Page, AZ and U.S. 93 at Hoover Dam, and U.S. 191 at Moab, UT, that allow trucks to cross the Colorado River in those 723 miles. Utah S.R. 95 via Hite, Utah is not suitable for high volume truck traffic.

The U.S. 93 Mike O'Callaghan-Pat Tillman Memorial Bridge crosses 900 feet above the Colorado River, 1,500 feet south of Hoover Dam, and is the central portion of the Hoover Dam Bypass Project. Construction on the nearly 2,000 foot long bridge began in late January 2005 and traffic began using the Hoover Dam Bypass on October 19, 2010. This signature bridge spans Black Canyon , and is one of the tallest bridges in America.

Most I-70 truck traffic headed to or from northern California and the majority of trucks on U.S. 191, use U.S. 6 over Soldier Summit to reach I-15 and I-80 along the Wasatch Front. The lack of a rail alternative for north-south freight in the mountain west also contributes to high truck traffic in Utah on U.S. 6, U.S. 89, U.S. 191, S.R. 20, as well as I-15.

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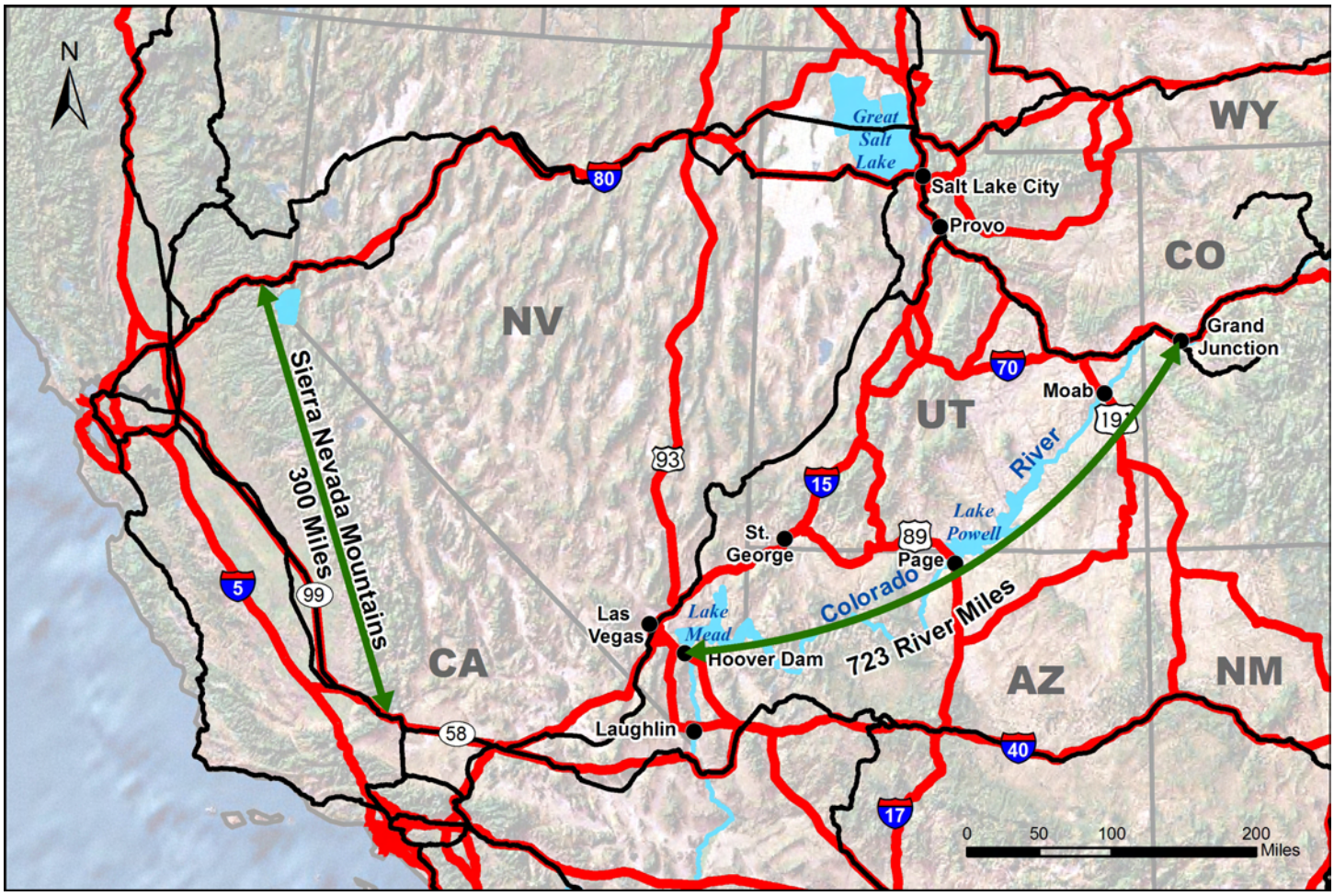
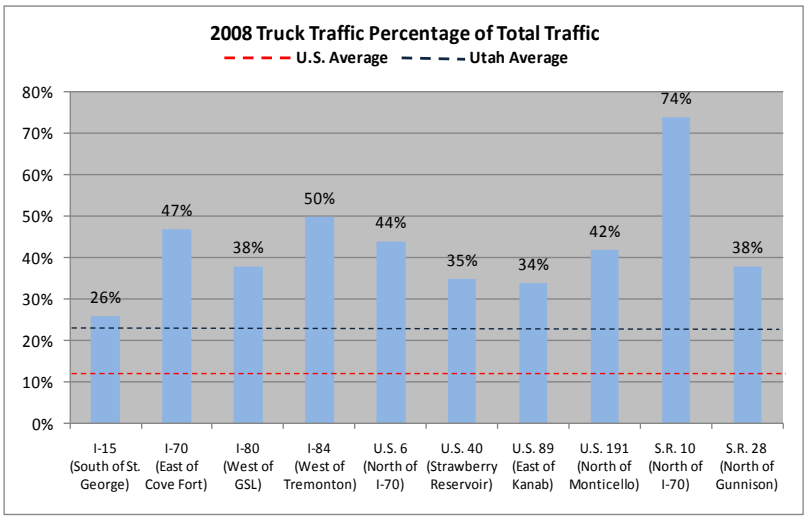


Highway Freight Routes Railroad Freight Routes

UTAH CORRIDORS IMPACTED DUE TO WESTERN GEOGRAPHY



*Average annual daily truck traffic (AADTT)

Source: U.S. Department of Transportation, Federal Highway Administration, Highway Statistics 2006, and Table PS-1. Utah Department of Transportation, Systems Planning and Programming Division, Traffic Analysis Section, and Truck Traffic on Utah Highways 2008.

Geography has made Utah the crossroads of the west due to its location east of the Sierra Nevada Mountain Range and north of the Colorado River Canyons.

As a result, geography is a primary cause of high truck traffic numbers on these important Utah highways. Special attention to these corridors for maintenance, safety, and capacity is imperative.

Long-haul trucks meet on U.S. Highway 191 north of Moab, UT.

For more information on this topic, contact the UDOT Planning Division.
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