



Featured Member [CTI, Inc.](#) (NOTE to viewers: Most of the following feature is excerpted from a January 2006 [Bulk Transporter](#) Magazine article on ATA-member CTI, Inc. entitled "Busy Market," by Charles E. Wilson. ATA thanks Bulk Transporter for allowing us to reuse the article.)

**FOR CTI, INC, the biggest challenge** seems to be keeping up with intense demand for cement and other construction materials throughout the Southwest. It's a challenge that has kept the fleet running at full bore for the past couple of years. All indications are that 2006 will be another busy year for the Rillito, Arizona-based tank truck carrier even though the red-hot housing market is beginning to show signs of cooling off in some areas Road construction, public works, and commercial development should more than make up for any fall-off in new home building.

"We have almost more work than we can handle right now," says Gregg Gibbons, CTI, Inc. President. "That's a good thing, but it keeps us scrambling. We think construction hauling in our primary areas of operation (Arizona and New Mexico) will stay strong for the foreseeable future no matter what the economy does in the rest of the country."

**"The economy in this area has been getting stronger and stronger since 1990. More Baby Boomers are moving to Arizona from the northern states. We have one of the most vibrant home building markets in the United States. The same goes for shopping center construction and infrastructure projects. We'll see a lot more road building in this region."**

- Gregg Gibbons, President of CTI Inc.

"Serving that construction market, CTI grew by more than 40% during the past four years. We try to grow in an educated manner, and only two factors have moderated our recent expansion. First is a cement shortage that is affecting many parts of the United States. That's followed by a driver shortage that is getting worse by the year."

## **Many Changes**

Arizona and the rest of the Southwest looked a lot more open and less populated back in the 1930s when CTI started out in the trucking industry. The company was established as a general freight carrier by G.L. "Rusty" Gibbons, Gregg's father.

The first big step into cement hauling came in 1949 as the post World War II building boom went into high gear. That was a time of regulated trucking, and the carrier was the

only one in Arizona with cement authority. The company name was changed to Cement Transporters Inc, and the first dry bulkers were added in 1962.

“Even though the trucking industry has been deregulated for more than 25 years, we're still the largest cement hauler in Arizona,” Gregg Gibbons says. “We run about 345 tractors and 260 dry bulker semis and doubles units. We also use a fleet of 55 tractors and flatbeds to transport building materials, including bagged cement, roof tile, block, and brick.”

**CTI has benefited over the years** from Arizona's success in winning sizable chunks of the federal highway funds. The highway projects have been among the factors generating high demand for cement. Statewide consumption of cement reached 4.1 million tons in 2004.

“We do a lot of highway construction,” says Shandy Copenig, CTI chief operating officer, Bulk Division. “One reason is that we have a big-enough fleet that we can dedicate a large amount of equipment to direct work without jeopardizing other contracts. One of the biggest direct-work projects was in 2004 when we participated in pouring 8,000 yards of concrete in a single day during construction of a new runway at Davis-Monthan Air Force Base (in Tucson). Typically, we're able to handle 40 to 50 loads a day during highway-related direct-work projects.”

One of the biggest challenges CTI has faced is the inability of cement producers and suppliers in Arizona to keep up with demand. About 40% of the cement used in the state now comes from outside sources, and some serious shortages have occurred in recent years.

### **Diversification Effort**

That's one reason management worked hard over the years to find diversification opportunities for the trucking company. Diversification was a big factor in the decision to change the company name to CTI Inc in 1977. Deregulation of the trucking industry in 1980 made diversification even more important.

Today, the carrier has a much broader portfolio that includes fly ash, hydrated and other types of lime, sand, calcium carbonate, animal feed, fertilizer, coal, ingredients used in explosives, wood pellets, and sulfuric acid. Hazardous waste is hauled by another division, operating as Chemical Transport Inc.

“The wood pellets are an interesting opportunity,” Copenig says. “They are made from dead timber in the national forests, and there is a 30-year supply just in Arizona. The

pellets can be a replacement for natural gas and petroleum-based fuels used for heating and power generation.”

Diversification included adding extra terminal services—such as storage silos—and providing rail transloading capabilities. CTI's terminal (one of nine in the company network) in Clarkdale, Arizona, has four storage silos that are leased to a customer. CTI also has significant portable dry storage — 12 guppies that hold 4,100 cubic feet and seven with 1,600-cu-ft capacity.

On the transloading side, CTI hauls cement at several customer-owned sites, and it acquired a facility in Globe, Arizona, in 2004. Currently, the Globe facility is used for shipments of perlite, which is mined nearby. The mineral is hauled to the site in dry bulkers and is transferred into rail hopper cars. The facility has a siding with four car spots.

CTI manages logistics operations at a facility in Gallup, New Mexico, under contract. CTI personnel coordinate inbound and outbound shipments by truck and rail (30 to 40 railcars at a time). In addition, they oversee product storage in silos.

**Responsibility for coordinating** the varied CTI transportation operations falls on the shoulders of dispatchers and customer service personnel. The Rillito terminal has the dispatch office for most of the CTI dry bulk operations and the customer service center, which was established in 2005. Hazardous materials shipments are dispatched out of the Douglas, Arizona, terminal. A small dispatch office in Gallup handles all of the activity in New Mexico and Texas. “We schedule 720 loads a day company wide, and we are always looking for better ways to coordinate the activity,” says William Dalton, CTI dispatch/logistics manager. “Our new customer service office is a good example. We opened the office last year with four employees, and they are processing 600 loads a day.” The customer service staff works closely with the company's five dispatchers. Key objectives of the dispatchers and customer service personnel are to ensure that CTI's trucks run 24/7 and customers are provided with error-free, on-time service.

A variety of tools are available to help dispatchers keep an eye on the fleet. They include a mapping program that was created in-house by Pete Basha, CTI training coordinator. Using Macintosh graphics capabilities, he creates extremely detailed maps of each customer delivery location. Dispatchers and drivers can print out the maps at each terminal. The dispatch operation currently has 780 maps on file in the computer system. Each map provides a detailed layout of the customer plant or facility, as well as special delivery instructions. Map information includes notes on the equipment needed by each customer and which CTI vehicle configurations can access a customer's facility.

## **Fleet Management**

Dispatchers also are making good use of Maddocks fleet management software and GPS-based on-board communications in the tractors. "We've been using the Maddocks system for about four years, but we just added the dispatch capability in November 2005," Dalton says. "GPS also is new for us." He adds that the objectives with the GPS are electronic driver logs and seamless billing. The computerized links make it possible to provide customers with a realistic estimated time of arrival for every load. In addition, the carrier can track out-of-route miles and employ geofencing when needed for a shipment.

The average roundtrip for a tractor-trailer rig in the CTI system is 240 miles, but some trips are as much as 600 miles. CTI drivers average 80,000 miles a year, but some of the company's drivers run 110,000 to 140,000 miles annually. Drivers for the carrier average 2.4 loads a day, but some have the opportunity to move as many as eight loads in a single shift.

"Many of our drivers are out and back everyday, but some spend a week at a time on the road," Dalton says. "We want them home by the weekend, though, for the 34-hour restart. That's an important benefit for our business, and it's one reason we like the new hours of service."

A three-prong driver pay program was designed to reflect the diverse nature of the operation. An hourly scale is used to compensate drivers for all work done before transportation of a load begins. Next is per-load pay for trips up to 140 miles, and this scale applies to about 80% of the loads hauled by CTI. The third pay level is calculated on mileage, and it includes the guarantee of a backhaul to keep the rig loaded for the full length of the trip.

## **Driver Shortage**

The pay scale has helped CTI moderate the impact of the driver shortage in Arizona, but the carrier still has to work hard to find the quality personnel it wants. "Phoenix has the tightest job market in the state, but Tucson is almost as bad," says Penny Gonzales, CTI director of human resources. "We even tried to hire Hurricane Katrina evacuees, but we didn't get a single inquiry." She adds that CTI pays close attention to driver qualifications despite the shortage of candidates. "Truck driving is a very different job today, and it's very important to hire the right type of driver," she says. "We want long-term employees."

The carrier continues to look for new sources of drivers, and that includes actively recruiting people who have recently left the military. CTI doesn't take graduates fresh out of truck driving schools, but management is exploring the possibility of a cooperative arrangement with local schools. The carrier also no longer requests hazardous materials endorsements for drivers handling only construction material cargoes. "This is a change in policy for us," Gonzales says. "At CTI, hazmat endorsements are required only for

drivers who will be handling such cargoes as acids and explosives. However, we still give hazmat training to all of our drivers.”

CTI wants drivers with at least a year of over-the-road truck driving, and it wants to see employment continuity. Minimum age is 22, and the applicant must have a verifiable record of safe driving.

**When the company finds a good truck driver**, it wants to make sure it holds onto that individual. Retention factors include a good pay and benefits program. In addition, the company implemented a new program in 2005 called Ground School Training for newly hired drivers. “We started out focusing just on bulk activities, but it will be expanded system wide,” Gonzales says. “We want our drivers to be able to handle all of the equipment in this company. We want to increase their confidence on the job. The program seems to be paying off with increased attendance. We lost just 11 of the 92 drivers who went through the program initially.”

### **Premium Tractors**

Well-maintained, premium tractors also play a role in driver retention. As part of the fleet renewal and expansion program, CTI plans to purchase 45 new tractors in 2006. CTI runs both Kenworth and Peterbilt conventionals, and they are specified with construction-level interiors. Driver comfort features include air suspensions and air-ride driver seats, heated and remote control mirrors, sun visors, and tinted windshields.

Tractors are specified with Caterpillar C13 engines rated at 370 horsepower and Eaton Fuller 10-speed transmissions. Transmission coolers are necessary to help handle Arizona's summer heat. Most of the tractors in the fleet have a 40,000-lb-capacity suspension, single-drive axle with a 3.80 ratio, and a tag axle.

“Our goal is the lightest tractor practical,” Copeney says. “We strip out as much weight as possible when we specify power units, and we're at a 12,400-lb tare weight right now.” Tractor-mounted product handling equipment includes either Garrett Turbo Conveyors or Gardner Denver blowers. The Turbo Conveyors have been used for many years and work well with cement. Gardner Denver blowers are specified on tractors used with semi-trailers that haul heavier products such as salt and limestone.

### **Semi-Trailers**

The number of semi-trailers has been growing steadily in the fleet. “We're at the point now where dry bulk semi-trailers are requested 65% of the time by our customers,”

Copening says. "We're looking at buying 15 new dry bulkers in 2006, and they will probably all be semi-trailers."

Most of the dry bulkers in the fleet were built by J&L Tank Inc. "We selected J&L as our primary dry bulk trailer supplier because the manufacturer builds to our specifications at a good price," Copening says. "Availability also is good." Dry bulk doubles trailers are permanently mated, and each trailer has a 570-cu-ft capacity. Semi-trailers range in capacity from 1,000 cubic feet to 1600 cubic feet. All of the bulkers are specified with bottom-drop capabilities. Most of the bulkers have manufacturer-standard valves, piping, and other hardware. Other equipment includes Michelin 11R22.5 tires and Goodyear product hoses.

With construction hauling demand expected to remain strong throughout the CTI operating area, the fleet should have a busy 2006, Copening says. There will be plenty of work for every new piece of equipment being purchased.

**"From nearly its inception as the Arizona Motor Transport Association (now the ATA), CTI was an active member of the association and its board. Due to changes in CTI management, CTI drifted away from the association for several years. As several problems with the State came up and the company developed a growing desire to participate in Arizona trucking, CTI returned to the ATA.**

**"With the ATA, CTI was able to either resolve those issues or be a voice in the legislative direction of Arizona with respect to those issues. CTI is very happy with the many changes that have come about since Karen Rasmussen has headed up the Association and helped guide its services to be services that CTI and any other Arizona trucking company can use. I highly recommend the ATA to Arizona truckers and to its related service sector."**

*- Tom Jones, CTI, Inc. CFO (ATA Member, Board of Directors & Strategic Planning Committee)*