

Just as the United States researches alternatives to replace fossil fuel, so are Florida's legislators and leaders recognizing the gas tax as fossil funding and exploring new ways to finance transportation infrastructure projects.

Public-private partnerships, TIFIA, GARVEEs, State Infrastructure Banks, user fees and other innovative finance methods—these are our alternative funding sources, the ethanols and hydrogens of our industry. With these creative options, state and local officials can complete a backlog of congestion-related infrastructure projects in record time and without waiting on a cent of gas tax revenues.

Now, as elected officials begin a new legislative session, is the perfect time for engineers to educate their clients about these options.

## **Our Fossil Funding**

Until now, the federal gas tax has been the source from which all infrastructure funding flowed. Expanded in 1956 as part of the interstate program, the gas tax was intended to maintain highways and build new roadways. From that time forward, departments of transportation

knew where their money was coming from, how much to expect and what they were going to spend it on.

The amount of federal gas tax, currently 18.4 cents per gallon, has remained unchanged since 1993. It is a flat tax, and does not increase even if gas prices do. In addition, inflation has seriously eroded the purchasing power of its revenues. Today, one dollar in the national Highway Trust Fund is equal to about 46 cents in 1980 and about 21 cents in 1970.\*

Plus, today's motorists drive more fuel-efficient vehicles. That efficiency, although a positive, also has put a dent in gas tax revenues. The Florida Department of Transportation reported 2006 gas tax revenues actually were lower than 2005 revenues due to increased fuel efficiency.

Indeed, it seems the revenue stream that once gushed funding is slowing to a trickle. The \$50 billion generated annually just isn't enough. While it sounds like a tremendous amount of money, those funds fall critically short of the \$94 billion needed each year to adequately cover the cost of the country's transportation needs.

## **The Perfect Storm**

The declining gas tax isn't the only force driving the creative financing movement. It's a perfect storm of events. In Florida, millions of dollars of critically needed highway projects have been deferred because of:

- Surging fuel prices.
- Skyrocketing material costs\*\*:
- Earthwork, once \$4.96 per cubic yard, is now \$15.40.
- Asphalt prices jumped 54.5 percent since 2004.
- Concrete prices increased 36.2 percent from 2003 to 2005.
- Structural steel has nearly doubled in price since 2003.
- Reinforced steel costs—up a whopping 141.3 percent since 2003.
- Soaring population. From 2003 to 2004 alone, Florida grew by an estimated 1,216 persons per day.
- Widespread reconstruction. In the wake of eight hurricanes since 2004, demand has surged for materials and labor throughout the Southeast.
- Public agency bidding is less competitive and bid prices are rising.
- For the first time, agencies say the cost of acquiring property is more than the cost of the road construction. Humorist Will Rogers was right when he said, "Buy land. They aren't making any more of it."
- Finally, tolling probably the most widely known creative financing mechanism to date – has experienced historic technological advances in the past decade. Those advances are making it the finance option of choice for cash-strapped states, such as Florida.

## **Our Creative Financing** Renaissance

Creative financing is not the transportation industry's next big trend. Trends end. This is life as we now know it. Our once-homogenized funding process is undergoing a mega shift. During the 21st century, how you pay for your next infrastructure project is almost as wide-open as your imagination.

Passage of the \$286-billion SAFETEA-LU transportation authorization bill helps. Although this federal legislation provides a modest funding increase, it's purposely less than half of what is needed. Why? Congress is seeking to revolutionize transportation funding by encouraging public agencies to find innovative ways to supplement the traditional gas tax.

Below are some of the creative financing tools states are using. As you read them, realize it may take more than one to fund your project.

**P3s:** Public-private partnerships are contractual agreements between public and private sector partners that allow more private sector participation than is traditional.

**Example:** In Texas, Cintra-Zachry was chosen as the state's first private sector firm on the Trans-Texas Corridor. Under the agreement, Cintra-Zachry will invest more than \$6 billion to fully design, construct, operate, and maintain 350 miles of the expansive corridor, which eventually will stretch from Mexico to Oklahoma.

Texas officials say this partnership will benefit taxpayers by holding down costs, while allowing various phases of the project to move forward at the same time, rather than requiring one phase to be complete before another

Having become a more common method of doing business, P3s likely will be the delivery mechanism for most major projects in the next 20 years. In fact, several projects in Florida currently are considering P3 funding. Among them: the North Tampa East-West Road Project, the Port of Miami Tunnel and the expansion of Interstate 75 in southwest Florida.

SIBs: The National Highway System Designation Act established State Infrastructure Banks in 1995. These banks use seed money from the federal or state level to get started and offer state and local government agencies a range of loans and credit enhancements to finance transportation projects.

The new SAFETEA-LU SIB program gives states the capacity to increase the efficiency of their transportation investment and significantly leverage federal resources by attracting non-

www.fleng.org

federal public and private investment.

**Example:** The Ohio SIB program was originally given \$30 million by the state and had access to federal funds nearly twice that amount in any given year. In its first two years of operation, the SIB funded 15 separate projects ranging from \$300,000 to \$20 million. Projects consisted of intermodal facilities, roads, interchanges, a viaduct, and right-of-way acquisition. Both private and public projects were

During the 21st century, how you pay for your next infrastructure project is almost as wide-open as your imagination.

**GARVEEs:** Grant Anticipation Revenue Vehicles allow states to issue bonds secured with the promise of future federal aid funds.

**Example:** Ohio, the first state to leverage federal dollars through GARVEEs, sold five GARVEE issues totaling \$439 million between 1998 and 2004. The proceeds are helping to finance Spring-Sandusky Corridor improvements, the new Maumee River Bridge and the Southeast Ohio Plan.

**TIFIA:** The Transportation Infrastructure Finance and Innovation Act offers states credit assistance to help them pay for large, partially funded projects.

**Example:** TIFIA gave sponsors of California's State Route 125 south toll road and the central Texas toll road a way to boost debt-service coverage and enhance senior obligations at an affordable cost. Also, flexible repayment terms will facilitate the toll financings, enabling a better match of loan repayments to expected revenue

Public-public partnerships: Here, several jurisdictions within one area may agree to collectively fund and/or develop an infrastructure project.

**Example:** The high-occupancy toll lanes in Houston were built when the Harris County Toll Road Authority, the Texas Department of Transportation and the Houston Metro combined funds.

**HOT lanes:** High-occupancy toll lanes allow single-occupancy vehicles to use high-occupancy vehicle (carpool) lanes for a fee. With the passage of SAFETEA-LU, HOT lanes now can be included anywhere. And, while this financing option may not always be a moneymaker, it can pay for operating costs of the new lane, as well as manage traffic demand to improve traffic flow.

Example: In 1996, San Diego drivers in single-occupancy vehicles began paying a toll each time they used the interstate's HOT lanes. The lanes generate about \$2 million per year. Half of that revenue is used for upkeep and operations of the toll road. The other half pays for express bus services on the corridor.

## **More to Come**

Most of the creative financing tools listed above didn't exist 10 years ago. Other methods, yet to be imagined, may be the financing norms 20 years from now. As they say, necessity is the mother of invention. That couldn't be truer for the transportation infrastructure industry. Creative financing is giving state and local officials many innovative options for getting their projects built.



About the Author: Jack Finn and his team work with turnpike and toll authorities nationwide. His lead role at HNTB, more than 25 years of toll engineering experience and numerous

professional affiliations make him a national tolling expert. Contact Finn at 407-805-0355 or jgfinn@hntb.com.

Photo credit: © 2007 HNTB Companies/Mark McCabe. TxDOT chose HNTB as a partner on the Dallas High Five Interchange, this signature project stands more than 12 stories high and connects Texas State Highway 71 (Central Expressway) with Interstate 635 (LBJ Freeway) it is the city's newest landmark.

- \* Included as part of Rep. Oberstar's remarks on April 18, 2005, at the fourth James L. Oberstar Forum, hosted by the Center for Transportation Studies and held at the University of Minnesota.
- \*\* According to Florida Transportation Monthly.