Innovative Financing for Highway Projects

By Robert Kleinburd

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This article will discuss innovative financing for highway projects, such as cash flow options, financing of debt, tolling options and public/private partnerships.

Traditionally, most State highway agencies utilized a pay-as-you-go approach to financing their highway improvement programs. This means that they would analyze their expected total combination of both State and Federal funds in future years and determine how they would allocate the monies to future projects. The costs associated with a particularly large and expensive project could be spread out over several years. In projecting out a State’s highway program, the responsible officials had to take into account the costs of those projects that would be 100% State funded and those that would be Federal projects, typically requiring a State match of 20% to 80% of Federal funds.

In recent years the FHWA has provided the States with various funding opportunities that could help manage the use of both State and Federal funds in order to make the most efficient use of available funds. Most of these financing options afford earlier construction with potential attendant cost savings from inflation of construction costs and the earlier realization of road user benefits. Listed below are the more...
significant funding options that fall under the heading of “innovative financing”. Each of these funding options has a wide variety of rules, guidelines, and nuances that are often quite complicated. Each option listed below is described at its most basic level.

**CASH FLOW OPTIONS**

The FHWA makes certain procedures available which could assist States in managing the 20% match requirement to their greatest advantage.

1. **Advance Construction**

In those situations where a State has used (or plans to use) all of its available existing Federal funds, and still wishes to move additional projects to construction, future Federal funds can be committed to the project. In this situation, State funds would be utilized from an existing pot of money, and then there would be the ability to replace those State funds with Federal funds when a new pool of Federal funding was made available. Prior approval from the FHWA is required, and the subject project must be set out in the State Transportation Improvement Plan (STIP).

**Advantage** - This procedure allows States to advance their programs with the assurance that future Federal funding will be available to provide compensation for previously authorized projects.

**Disadvantage** - If future Federal funding is reduced below what had been anticipated, it could result in a State having to reevaluate and adjust its Federal-aid program.

2. **Tapered Match**

In certain situations where a State does not have the required 20% matching funds for a project available, they may request a payment schedule whereby a reduced match is contributed early in the project, with a proportionally larger match at the end of the project. Ultimately, the normal 20% match is achieved by project end.

**Advantage** - This allows a State to advance a project to construction when there is a near-term lack of available State funds.

**Disadvantage** – This procedure requires a more sophisticated level of bookkeeping and fiscal management than normal. If projected State funds do not materialize, the State would have to adjust its program schedule.

3. **Toll Credits as Match**

Where a State has an independent toll authority, the amount of funds that the toll authority spends to build or improve public highway facilities that serve interstate travel, may be used as State match to federal-aid projects.
Advantage - This allows States to maximize their 20% match requirement.

Disadvantage - Complicated record keeping required.

FINANCING OF DEBT

In those situations where a State borrows money in the municipal bond market to finance its transportation program, the interest rate that the State is required to pay will have a significant financial impact. Where hundreds of millions of dollars are being borrowed, even the slightest lowering of interest rate will result in significant savings to the taxpayer. The FHWA has developed several options that States may consider utilizing that could have the ultimate effect of reducing interest rate charges on borrowed money.

1. Grant Anticipation Revenue Vehicles (GARVEE)

In order to reduce the risk factor associated with borrowing funds, and accordingly reduce the interest rate charged, a guaranteed source of repayment money is useful. A GARVEE financing vehicle allows the State to pledge future Federal funds as collateral for the bond-financing instrument. The future Federal funding can be pledged to help pay both principal and interest debt. The FHWA must give prior approval for any project (or group of projects), which applies for GARVEE status.

Advantage – Lower debt financing for projects

Disadvantage – Additional record keeping and specific dedication of future Federal funds.

2. State Infrastructure Banks (SIB)

In order to allow surface transportation projects to be funded with money borrowed at a relatively low interest rate, States may establish an internal bank of funds that is made available for loan on qualified projects. Federal-aid funding is available to help establish and maintain the bank. As borrowed money is returned, the bank is replenished.

Advantage – Loans are made available for qualifying projects at a lower interest rate than is available in the public market.

Disadvantage – Complicated to establish, and requires significant management oversight.

3. Transportation Finance and Innovation Act (TIFIA)

The U.S. Department of Transportation has created its own banking organization, which has a separate pool of public funds available to assist eligible surface transportation projects. This could include highway and transit projects. The TIFIA banking organization has the ability to offer direct loans, loan guarantees, and lines of credit, which are available to both public and private entities. The basic concept of the TIFIA program is to provide reasonable funding options for large projects (typically costing in excess of 100 million dollars) utilizing guidelines as established by the U.S. DOT. The use of TIFIA funding does not have any impact on a State’s normal federal-aid apportionment.

Advantage – Loans and loan guarantees are made available for qualifying projects at a lower rate than is available in the public market. The TIFIA bank is established and in operation.

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Disadvantage – Must apply (with application fee) and compete for funding categories. TIFIA will also assess a substantial processing fee to defray the costs of negotiating the loan agreement.

**TOLLING OPTIONS**

As the costs of managing the highway program continue to rise faster than revenues are increasing, the option of placing tolls on roadways becomes more prevalent. This option allows the State to collect toll revenues from those who are using the roadway.

1. **Tolling Federal-aid Highways**

The FHWA now allows tolling of most roadways other than the Interstate Highway System. If a State wishes to place tolls on either a new or a reconstructed roadway, it is allowable as long as the State executes a “toll agreement” with the FHWA setting out the manner in which the tolls will be used. Normal Federal-aid financing of construction is available.

Advantage – A source of road user funding for project purposes.

Disadvantage – Additional motorist costs, along with toll collection expense.

2. **Interstate Tolling Pilot Project**

The FHWA has a pilot project to allow new tolling of a portion of the Interstate System in order to finance the improvement or expansion of the Interstate facility. The various States interested in this option must compete for eligibility. Normal Federal-aid funding of construction is available.

Advantage – A source of road user funding for project purposes.

Disadvantage – This option is currently very limited. Tolling would place additional costs on the motorist, along with toll collection expense.

**PUBLIC/PRIVATE PARTNERSHIPS**

Public/Private Partnerships represent a vast array of projects where a private concern invests in the public roadway construction or upgrading, with a promise of receiving a future revenue stream. Essentially, the private concern enters into a business arrangement and hopes to recoup the investment in the future, along with a profit on the investment. These partnerships can be configured in many ways, depending on the needs of both the public entity and the private investor. This situation almost always involves some method of toll collection.

Advantage – Instead of borrowing money with associated interest charges, a public entity can enter into a financial arrangement with a private concern that treats the situation as a financial investment.

Disadvantage – The public entity loses a degree of control over the project, as the private concern treats their return on investment as a major component of the venture.

As you can see, each approach has both advantages and disadvantages. President Obama has proposed a National Infrastructure Bank that would offer one more option for alternative financing. The most likely time to make any changes to any financing option would be at the time of authorization of the next highway legislation bill. The last transportation reauthorization bill, SAFETEA-LU, expired September 30, 2009 and has continued under eight short term extensions. The current extension expires March 31, 2012.
Adult Learning Techniques

By Ted Pluta, VP, ORC Training, LLC

ORC has a long and successful history of training in the right of way industry. In order to be recognized as a leader in the training of right of way professionals our instructors have to be well versed in the world of adult education.

As adults we learn differently than we did in our earlier years of education. One of the main concepts of adult learning is the attendees of classes are much more likely to learn something in a class they are taking because they chose to take the class. This certainly makes sense as we all are more likely to absorb the material when we are attending because we want to be there.

Once adults are in a classroom situation there are very specific approaches that will assure a better learning experience. Class attendees need to know why they should be learning the topic being presented. For a relocation class, the need can clearly be defined and outlined by explaining the necessity to work within the federal and state guidelines (URA) to assure compliance and maximize funding. It is important to make sure the material is presented in a manner the attendees can relate to i.e., local examples are always useful when providing examples of the material being covered.

Adults learn better with interaction. Successful training sessions always involves group problem solving. Group problem solving allows the class participants to work in small groups and apply information that has just been presented to solve problems. This acts as a reinforcement of the technical information that has been covered in the class. By applying a “hands on” approach members of the group can see how the regulations are applied to real world situations and why it is important to understand the topics being presented. This also follows with the “need to know” philosophy of adult learning. For basic courses, problem solving is essential to show class participants how the course topics apply to their jobs and how the information will benefit them in their everyday work environment. For more advanced courses, these group problem efforts often lead to participants relating the topics to current situations they are experiencing and as a result the materials presented become very relevant and are reinforced to the attendee.

ORC trainers have had the benefit of attending seminars on adult learning experiences and have been able to apply the information to the class room experiences throughout the nation. As a result of our experience in the training industry, ORC has been selected by the National Highway Institute (NHI), the training division of FHWA, to develop classes in the right of way industry and also has been providing instructors for NHI for many years. In addition to NHI, many of our trainers also are certified to instruct for the IRWA. ORC trainers have also worked closely with various state and federal agencies to prepare “custom” courses to benefit their employees.

All courses are designed to be interactive and to appeal to those who are visual, kinesthetic, or auditory learners through the use of PowerPoint slides, instructor led courses limited to no more than 30 participants and the use of small group problem solving. In addition, the instructors research and use local examples that are of interest to the participants.

Frequent breaks serve as an opportunity to catch up on work related and personal issues and keep the attendees from becoming overloaded with new information or perhaps a trainer’s worst nightmare, the attendee becomes just plain bored!

In summary, adults will learn more in sessions where the material is presented in a manner that shows the attendee why it is important to learn materials and how it benefits them in their job. The reinforcement of the presented materials is best obtained through group workshop problems and letting the participants experience “hands on” problem solving. Interest is maintained in the classroom by frequent breaks. Of course, all of this can be improved upon with a little bit of humor intertwined with some real life examples!
ORC Training Awarded Second NHI Contract

ORC Training, LLC, an affiliate of O. R. Colan Associates, was recently awarded a second five-year Indefinite Delivery/Indefinite Quantity (ID/IQ) contract from the Federal Highway Administration (FHWA) to develop, update and deliver nationwide real estate training for the National Highway Institute (NHI). This work requires skilled, knowledgeable and experienced subject matter experts who team up with instructional system designers to develop new curriculum materials or update existing training materials. For training delivery, NHI requires instructors with superior subject matter expertise and topic-related practical experience who embrace adult learning theory.

Under an ID/IQ contract, individual task orders are separately awarded for specific assignments, such as the update of an existing course or development of a new course. ORC Training recently updated both the Appraisal for Federal-Aid Highway Programs course and the Appraisal Review for Federal-Aid Highway Programs course through task orders issued under an IDIQ contract previously awarded in 2010.

ORC Training also received awards to deliver the following NHI Real Estate courses under the previous IDIQ contract:

- Basic Relocation under the Uniform Act
- Advanced Relocation under the Uniform Act
- Business Relocation under the Uniform Act
- Appraisal for Federal-Aid Highway Programs
- Appraisal Review for Federal-Aid Highway Programs
- Introduction to Federal-Aid Right-of-Way Requirements for Local Public Agencies

ORC has delivered the NHI Relocation courses for many years, and completed the updates of these courses in the last few years to incorporate the 2005 revisions to the federal regulations, as well as integrate adult learning principles. ORC has also delivered the NHI Appraisal and Appraisal Review courses for the last 5 years.

ORC Training is proud and excited to continue its long, well-established relationship with the National Highway Institute, the training arm of the Federal Highway Administration. We look forward to the successful development and delivery of NHI real estate courses that enhance the training experience for the transportation community.
One of the latest offerings of educational materials from the National Highway Institute is a course with a long title, “Introduction to Federal-Aid Right of Way Requirements for Local Public Agencies”. Anyone who has been involved in right of way is aware that the local public agency (LPA) segment is growing. However, those same persons also know that the LPA right of way work has many problems.

So how does that relate to Wisconsin cheese and ice cream? Well let me see if I can tie all this together. Let’s first discuss the LPA right of way training program and then discuss dairy products in Madison, Wisconsin.

A few years ago, the Federal Highway Administration (FHWA) conducted a national review of the LPA program. What they found were deficiencies contrary to acceptable practices. There were deficiencies in all aspects of project production and right of way problems were noted in several states. The National Highway Institute along with the FHWA Office of Real Estate Services determined that training was the best solution to the problem. So NHI, FHWA and ORC developed a training course targeting the requirements of the Uniform Act for local agencies. States could use this course to assist it in meeting its training obligations.

The Wisconsin DOT has an ongoing program of training for its LPAs involved in the right of way process. Their goal is to offer frequent training for LPAs from a variety of sources. The new NHI course fit neatly in their plan. Last November, the State sponsored the LPA training course in Madison and invited a wide range of local agencies to participate.

The course was well received. Comments and written evaluations from the attendees indicated they were pleased with the training and felt it met their agency needs. Wisconsin also felt it was useful to reinforce what they had been telling the LPAs by using another source.

Since Wisconsin declares itself America’s DairyLand, it seemed appropriate to investigate their claim after the class was over. Wisconsin residents love their cheese and ice cream products, and it’s easy to see why.

Everyone you ask in Madison seems to have a favorite place to buy cheese. But there is a unique spot, an independent food store called Brennan’s Market, that specializes in award winning cheese based on results of various fairs. These are artisan cheeses, unique and limited production runs.

What is new and artsy in cheese? Well, try some Basil Farmer’s cheese, Cranberry Colby, Black Olive Havarti & Apple-Cinnamon Cheddar. And the best part of shopping at Brennans is that you get to sample them all in the store before you buy. If you are not a fan of unusual cheese, just ask for some of the squeaky cheese curds. A real “cheesehead” experience!

For dessert, head over to the University of Wisconsin Student Union where the dairy school serves up homemade ice cream with ten percent butterfat in all sorts of interesting flavors. After you get your ice cream cone, walk out on the Student Union terrace overlooking Lake Mendota. After all those cheese samples and the ice cream cone, you might need a walk. So go ahead and walk the trail system surrounding the lake. What a great way to get some exercise in wonderful Madison, Wisconsin.
In the Works – Contracts Awarded October 1 to December 31, 2011
By Steve Toth, Chief Operating Officer

ORC has been selected / awarded the following projects:

**Appraisal Services**
- INDOT – US 31 Hamilton County
- Cleveland Airport – Historic Appraisal for Riveredge Area
- Cuyahoga County – Appraisal for Whitlock Building
- GSA - Indefinite Delivery Indefinite Quantity (IDIQ) Appraisal and Consulting Services For the Great Lakes Region, Region 5 Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin
- ODOT – CUY 90-14.90 – Appraisal Review services
- CLA – CR 380 Croft Road – Appraisal Review services
- Sheffield Village – LOR 301 – 21.50 Appraisal Review services
- City of Cincinnati Metropolitan Sewer District – Denham and Carll Street – Appraisal Review Services
- City of Kent – Erie & Depeyster Street Reconstruction
- SUM 619-0.12 – Cost Estimating for Steps 2 & 3
- ODOT SE Region
- MOE 026-9.76 - Summary Appraisal
- MOE 145/379-10.45/6.66
- MRG 78-13.44
- MEG 143-14.00
- ATH 50-39.10 PID 22598
- ODOT NW Region
- MED 94-17.98
- MED 71-14.80
- LOR 90-13.01

**Arizona**
- Desert Leaf Relocation Services

**Federal/Training**
- PMOC FTA Contract – TO#8 – Eagle, MAX & West Corridor Project

**Florida**
- Palm Beach Airport – Task Order for appraisal services

**Indiana**
- INDOT – US 31 Hamilton County
- City of Avon – Dan Jones Road @ CSX Intersection

**Missouri**
- AMEREN – Real Estate Acquisition Services – On Call Contract
- Country Club Road – Acquisition services
- Conoco Phillips – ROW Clearing

**North Carolina**
- NCDOT 17 BP Bridge Replacement Projects – Group T

**New Jersey**
- NJSDA – Relocation Services contract for 3 year period
- NJ Transit – Union Dry Dock Project

**Ohio**
- Cuyahoga County Engineer – Snow Road Bridge #220
- Cuyahoga County Engineer – CR 39 Pleasant Valley/Bagley Road
- SUM 91/303 – 11.83/10.27 Title Research services
- Lake County Engineer – Vrooman Road Roundabout
- City of Lorain – Tower Blvd Extension
- ATB-90-22.06 Title Research
- City of Wooster – Friendsville Road
- HUR 61-21.87 – Title research services
- ODOT – CUY 90-15.24
- ODOT – HAM 75-2.30
- ODOT – MRW 71-3.17
- ODOT TRU 5-6.88 (PDP)
- SUM 619-0.12 – Title Reports
- Village of Boston Heights - Akron Cleveland Road
- LOR 57-19.42 Title Research & Cost Estimating services

**Texas**
- San Antonio River Authority – Real Estate Acquisition and Due Diligence Services
- San Antonio River Authority – Relocation Assistance Services for Bexar County Flood Control Improvement Plan

**Virginia**
- VDOT – Roanoke 10th Street Project