Washington’s Infrastructure Needs: Innovative Funding, Financing and Management Tools

As state and local government agencies find traditional funding and financing mechanisms inadequate to meet fully our infrastructure needs, they increasingly seek out new ways to pay for projects. This paper reviews new sources of money available to agencies and ways that the agencies may make more efficient use of their existing sources. Some of these tools and techniques have been around a long time but are seldom used, while others are truly new. They all, however, reflect a basic reality: we cannot continue to rely so heavily on broad, general taxes and fees.

The tools described fall into three categories. First are new revenue sources, mostly tied to some user benefit. Second are planning and management techniques designed to get greater efficiencies from existing revenues. Third are techniques that involve public-private cooperation.

NEW FUND SOURCES – VALUE CAPTURE

The availability and capacity of infrastructure – roads, sewer, and water – determine the degree to which property can be developed, and, therefore, its value. For example, residential property that connects to water and sewer systems is worth more than property that must rely on wells and septic systems, since public utilities increase the density of development the property can accommodate. Similarly, commercial property with good freeway access is worth more than isolated parcels.

The philosophy of “value-capture” is to take advantage of the increased value of property to fund the infrastructure that provided that increase in the first place. In other words, let development pull itself up by its own bootstraps.

The primary attraction of value capture techniques lies in their inherent fairness: those who benefit from an investment help pay for it. And if the program is well-structured, property owners will gladly participate,
since the increased value of their land will more than pay for the infrastructure contributions they must make.

The trick, as shown in the three descriptions below, is to tie the need for funds with the perceived benefit to the property owners. Three types of value capture treat this problem differently. Table 1 shows the advantages and disadvantages of each.

**Local Improvement Districts**

Although hardly an innovative technique, local improvement districts (LIDs) will be key to redevelopment of older residential and commercial areas that lack basic infrastructure like sewer service and sidewalks. LIDs are often challenging to implement but the results can definitely be worth the headache. (Municipal Research & Services Center, 2003)

Either a local government (city, county, special district) or a group of property owners can initiate formation of an LID. If, after a complex series of steps, the project and the LID to pay for it are approved, a further process is undertaken to determine how much each property owner will pay. The LID then becomes the basis on which the government sells bonds to finance the project. These bonds are repaid by the LID beneficiaries through annual property taxes, or, for water and sewer lines, through utility bills.

Approval of an LID does not have to be unanimous, so some property owners who disagree will end up paying anyway. But in no case will a property owner have to pay more in assessments than their property gains in value.

The primary difficulty with LIDs is that property owners must begin paying for improvements immediately even though they may not cash in on them for many years. For example, the owner of a large property with a septic system may not want to pay for a new sewer line if their septic system still functions and they do not plan to sell their property soon.

**Tax Increment Financing**

The Holy Grail for urban revitalization experts throughout the country, tax increment financing (TIF) has faced significant legal obstacles in Washington State, due to various constitutional prohibitions. State voters have rejected constitutional amendments that would have allowed the kinds of TIF programs used in other states, and recent court decisions have reinforced the difficulty.

Under TIF, an infrastructure improvement is financed with the increased tax revenues generated by property development in the vicinity. For example, if a city builds a new park next to a vacant lot, the owner of that lot may respond to the new amenity and build an apartment building. Under TIF, the new property tax revenue coming from the apartment building goes to help pay for the park, while taxes at the rate previously collected on the vacant lot continue to go to their usual jurisdictions.

Washington’s current TIF statute, adopted in 2001, attempts to get around the various constitutional and political objections, but has not
proved to be very workable. Because it exempts property taxes going to the state school fund, and allows capture of only a portion of the taxes going to other jurisdictions, it simply does not capture enough revenue to pay for major improvements. (Jay Reich, 2002; Jeff Nave, 2003)

Latecomer Agreements

Like an LID, a latecomer process requires property owners to help pay for a fair share of improvements they benefit from. But there are two crucial differences. First, in a latecomer process, the initial property owner who benefits from the improvement pays the entire cost up front, with reimbursement from other benefiting property owners coming later. Second, property owners pay their share only when they redevelop. So while the local government may require a latecomer process and may administer it, the transactions end up being between landowners (which may include governments).

Latecomer processes are optional under state law, and many local jurisdictions make no provision for them. Without a latecomer process, a property owner who funds infrastructure ends up subsidizing developers who hook into the new system or road subsequently. Absence of latecomer processes inhibits development of property in areas that need infrastructure upgrades, since property owners will wait for the other

Table 1: Value-Capture Mechanisms

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<th>Application</th>
<th>Advantages</th>
<th>Disadvantages</th>
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<td><strong>Local Improvement Districts</strong>&lt;br&gt;Areas with many property owners and where benefits are distributed evenly. For example, an older residential area that needs a sewer extension to replace failing septic systems and allow more dense development than septic systems allow.&lt;br&gt;Costs are shared fairly by all who benefit. Assessments paid over time to lessen the burden.&lt;br&gt;Complex to establish. Subject to challenges by people who do not want to participate or who feel their assessment is unfair.</td>
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<td><strong>Tax Increment Financing</strong>&lt;br&gt;Areas ripe for new development or substantial redevelopment where property values can be expected to increase substantially. For example, deteriorated industrial areas that can be converted to high-end residential.&lt;br&gt;Does not cost property owners anything directly. Does not require approval or consent of property owners.&lt;br&gt;Risk to local governments that revenues will not materialize and bond payments will fall to general fund. Other taxing districts may not want to see their revenue being diverted to projects they do not benefit from.</td>
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<td><strong>Latecomer Agreements</strong>&lt;br&gt;Areas with wide variation in benefits from redevelopment. For example, replacement of a sewer line needed by a large upstream development does not benefit current downstream users, but will benefit future owners who will redevelop the property.&lt;br&gt;Captures value only when that value is realized. Does not place a burden on property owners who do not need the new infrastructure.&lt;br&gt;Requires large, up-front payments by initial developer. Administrative challenge for local governments.</td>
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owners to move first and give them a free ride. The existence of a late-comer process may spur property owners to form an LID and get the improvements financed by everyone all at once.

NEW FUND SOURCES – CONGESTION PRICING

Tolls have been used in Washington primarily to fund bridge construction and will be used to fund the new Tacoma Narrows bridge. Washington has never had the kinds of toll roads that exist on the East Coast and in other parts of the world. That could change.

Tolls work best in cases where there do not exist attractive free alternatives. If a new bridge saves a half hour of driving, then motorists will pay a toll to save the time. But if alternatives, such as nearby surface streets, attract those who do not want to pay, tolls compound traffic problems by diverting traffic.

Tolls have gone in a new direction recently. Rather than paying tolls to use a brand new corridor, motorists now have the opportunity to pay a toll to avoid congestion in an existing corridor. And technology allows the road operators to vary the price depending on the level of congestion on the free line, ensuring that the toll road remains free flowing. Two approaches to congestion pricing have been underway for several years and appear successful.

Parallel Toll Roads

Where there is unused right-of-way in freeway corridors, extra lanes, financed by tolls, can provide alternatives to the adjacent free, but congested, lanes. Well-known examples of this are the SR 91 Express Lanes in Southern California. This 10-mile section of freeway lies in the median of the Riverside Freeway, which connects Orange and Riverside Counties. An automated toll collection system collects between $1 and $5, depending on congestion levels on the mainline. The new road was privately financed, but is now owned by Orange County. (Transportation Economic Partnerships Office, 2004)

HOT Lanes

Unused capacity in existing high occupancy vehicle lanes provides another opportunity to let drivers pay for quicker trips. Selling space to single occupant cars transforms the standard HOV lanes into high occupancy toll lanes, or HOT lanes. The advantage of this is that it collects new revenue from an existing investment that is otherwise being underutilized. In San Diego the Fastrak program on the I-15 Express Lanes allows SOVs to use the express lanes for a toll of between 75 cents and $4.00. (FastTrak Online)

In Washington, few corridors have enough excess right of way to consider building additional toll lanes. The Washington State Department of Transportation (WSDOT) is, however, seeking approval to institute a HOT lane on SR-167 in South King County as a pilot project. WSDOT studies indicate that some sections of freeway in East King County have excess capacity during mid-day that could be sold via HOT lane technology. (Washington State Department of Transportation (2))
One problem for toll roads is determining the appropriate toll rate, especially when they can vary, as in the California systems. The Puget Sound Regional Council recently launched a study to discover what sort of cash value commuters place on their access to roadways and, therefore, what they might pay in tolls. Five hundred volunteers have allowed their vehicles to be equipped with devices that use GPS technology to track their trips and charge them fees depending on where and when they travel. Volunteers are given “endowment accounts” from which these fees will be deducted. As an incentive to drive on less-congested roads, they can keep whatever is left in their accounts at the end of the study. Results are due in 2006. (Puget Sound Regional Council)

EFFICIENT USE OF TRANSPORTATION FUNDS

The infrastructure and public works fields have never been known as hotbeds of innovation and efficiency. Consumer products continually get smaller, lighter and less expensive, while delivering ever greater performance. And yet at the same time, infrastructure seems to get larger, more intrusive and more expensive, while performance deteriorates. Because we assume we will pay more and get less, agencies have little incentive to work toward efficiencies.

Of the various types of public infrastructure, roads and highways have generated the biggest concern about efficient use of funds. The Governor’s Blue Ribbon Panel on Transportation confronted this problem head-on, urging WSDOT to operate with greater efficiency and accountability. WSDOT responded with a series of initiatives, beginning with adoption of performance benchmarks for various aspects of the transportation system (including pavement condition, congestion, and bridge structural integrity) and a regular reporting on how those benchmarks are moving. WSDOT’s work program, “2003-2007 Business Directions” contains specific targets for operations and management, based on a range of efficiency measures, such as the time it takes to get projects bid and underway. (Washington State Department of Transportation (3)) The benchmarks for system performance and department management are all tracked through a quarterly publication “Measures, Markers and Mileposts,” also known as the “Gray Notebook.” (Washington State Department of Transportation (1))

The adoption of these efficiency measures is certainly encouraging, but it’s important to remember that it does little good to be efficient at doing the wrong things. The larger question is whether WSDOT is setting the right priorities and undertaking the right projects.

On the operations and maintenance side, the performance measures should indicate priorities for spending, based on accepted engineering standards. On the capital side, however, the Legislature has dictated the department’s work for the next decade by listing specific projects across the state. When a list is developed in a legislative setting, it inevitably reflects political considerations and the need to secure funding support.

The efforts of WSDOT mirror, to some extent, the larger “Priorities of Government” process undertaken by state government in the 2003-2005 and 2005-2007 budget cycle. Instead of the usual incremental
increases in agency budgets, each department was told to submit its budget request based on achievement of 10 priorities for state services (an 11th priority was added in the 2005-2007 cycle). To the extent that WSDOT ties its budget to its own specific performance measures, it will provide some assurance that scarce transportation dollars are going to the most pressing needs.

Still, an ongoing tension exists within transportation agencies, at both the state and local levels, between maintenance and upgrade to the existing system on the one hand and addition of new capacity on the other. Most agencies assume that with respect to general transportation dollars, maintenance comes first and new capacity comes second. Given the poor state of roads in nearly all areas, maintenance can soak up all available dollars and still not bring the whole system up to current standards. These agencies must, therefore, rely on separate, earmarked funds for major capital projects. WSDOT funded a set of “super category C” projects in the 1990s, and now has the “nickel” fund that is dedicated entirely to capital projects.

PRIVATE SECTOR ROLES – DESIGN-BUILD-OPERATE-MAINTAIN

In the early days of our country the private sector played a central role in infrastructure development, building canals, railroads, streetcars, water systems and ports. As governments strengthened they gradually took over the construction of public works, and for the past 100 years the private sector has served mostly in contracting roles, with government agencies providing overall project management and operation. In some areas that has begun to change. Allowing more central roles for private sector companies can provide flexibility in financing and more efficiencies in execution. While Washington has dabbled in privatization of infrastructure, it has not been a leader.

Infrastructure projects have a number of components, many of which are regularly contracted out to the private sector: planning, design, engineering, construction, finance, operation, maintenance. Innovation comes in when those components are combined to give a private contractor larger overall control of the project and greater accountability for outcomes.

The design-build-operate-maintain (DBOM) approach has achieved some significant successes. In a traditional design-bid-build approach to infrastructure, an agency hires one firm to design the project and another to build it, and then the agency maintains and operates the facility itself. In a DBOM approach, a single firm or team designs and builds the project, and then sticks around to operate and maintain it. Not only is this more efficient – the institutional knowledge follows the project all the way through – but it also provides very strong incentives for quality, since the firm will be responsible for building what it has designed and operating what it has built.

The most notable examples of DBOM contracts in the state have been the Seattle Water Department’s Tolt Filtration Plant, which opened in 2000, and the Seattle Monorail, which may get underway in 2005. In both cases, vendor teams were presented with performance objectives
and given some latitude in proposing ways to meet those objectives. In the DBOM approach the agency does not look for the lowest bid on individual pieces, but the most effective way to meet performance goals over time.

WSDOT had an elaborate DBOM program, the Public-Private Initiatives Act, adopted in 1993, which issued an open-ended call for proposals to privately build and finance transportation projects in the state. Although the program generated little notice at its inception, once teams announced projects, significant opposition arose, and the Legislature eventually scuttled it. The Tacoma Narrows Bridge project began under this program, but has evolved along more conventional lines. (Transportation Economic Partnership Office, 2004).

CONCLUSION: DO WE HAVE THE TOOLS?

Over the past generation, state and local governments have faced significant challenges funding infrastructure. Systems built during times of rapid growth and federal largesse now need major upgrades or replacement during a time when tax bases are not growing as fast and the federal government has backed off on funding state and local infrastructure. General taxes increasingly go toward major priorities like education, public safety and human services, leaving infrastructure out of luck.

In the face of these challenges, governments across the country have developed a range of innovative funding mechanisms and have dusted off some old ones. Washington State and its local governments have most of the known tools at their disposal, and many of these tools are in use. While work is needed on tax increment financing and public private partnerships, it is safe to say that agencies have access to most of the known non-traditional funding and financing tools.

The challenge, then, is to get more agencies to use them more often to pick up where traditional methods prove inadequate. Given the experience of the public-private partnerships in the 1990s, it is no wonder that governments want to stick to well-tested financing methods. But with several new approaches coming on line – WSDOT accountability, tolls on the Tacoma Narrows Bridge, a DBOM for the Seattle Monorail – the public will have a chance to see how to get more for its infrastructure dollar and how to better tie costs to benefits.
REFERENCES

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