

# Long Life, Good Health

## Asset Management Strategies for Major Transportation Investments

---

Pete Rahn, *New Mexico Department of Transportation*

Ray Tillman, *URS Corporation*

Thomas McPherson, *Ohio Department of Transportation*

Daniel Dornan, *Infrastructure Management Group, Inc.*

### LIFE-CYCLE PRICING OF CAPITAL INVESTMENTS: LONG-TERM WARRANTIES

*Pete Rahn*

**T**oday I am going to talk to you about the warranty on New Mexico's State Route 44 as well as the New Mexico Roadway Performance and Planning Matrix we have just developed.

First, the warranty. What brought it about? Here is a bit of background, and I think many of you from state departments of transportation will find it familiar. By the late 1990s, we found that during the past 26 years we had faced a continual increase in the number of deficient road miles on our system. Every year, deficient road miles went up, and finally 18 percent of our total system was rated deficient. Our investment needs topped \$11.3 billion, but our state transportation improvement program made only \$1.7 billion available—a far cry from the \$11.3 billion. All the while we were looking at huge increases in usage, and it was especially interesting to note that while our traffic volumes increased more than 300 percent in 10 years, our truck loadings had increased by almost 1,000 percent in the same period. To make matters worse, our revenues over the last 10 years, adjusted for inflation, had declined by 2.8 percent.

So we had problems. In response, we started looking at corridors rather than dispersing our efforts. It is not an exaggeration when I tell you that in the past, if we had enough money to build three bypasses but five com-

munities wanted a bypass, we would solve the problem by giving all five communities 60 percent of a bypass. Well, the good news was that none of them got mad at us, because they all got something. The bad news, of course, was that nothing got built, and our overall transportation system performed no better as a result of that investment. So we started looking at corridors as an antidote to the folly of squandering scarce resources because of politics.

New Mexico 44, which was one of these prime corridors, represented our first big dive into innovative finance. This corridor provides the primary route from Bernalillo, just north of Albuquerque, northwest to Bloomfield, in San Juan County, New Mexico. It extends for 240 km (149 mi), most of which is two-lane highway that has been plagued by cataclysmic crashes with horrible fatality numbers.

The cost to construct two lanes throughout this stretch was estimated at \$214 million, but we did not have the needed funds. This is when we turned to innovative financing. We put together a package that involved a developer who would design the project, manage the construction, and provide a 20-year warranty on the work it had done. This was not design/build, because we did not have the necessary state legislation to enable that approach. However, we got as close as we could without crossing the line. Another advantage to the approach is that New Mexico has been a pay-as-you-go state until very recently, and the warranty gave us an opportunity to move closer to a pay-as-you-use concept. Also, even though some people view pay-as-you-use financing as a mortgage on our

children's future, we can look them straight in the eye and say that the warranty will ensure an excellent road for the next 20 years. In essence, we are protecting the investment we are making.

What does our warranty cover? For the road surface, it covers 20 years or 4 million equivalent single-axle loads (ESALs), whichever comes first. For erosion and drainage control, it covers 10 years or 2 million ESALs. We have a warranty on existing bridges that are going to be left in place and not reconstructed. For paving, the warranty is deemed "shoulder-to-shoulder," and we demand a pavement serviceability rating of 4.5 out of 5.0 for the first 5 years. We require a rating of 4.0 for the next 5 years, a 3.5 rating for the third 5-year segment, and by the end of the 20-year period, a pavement serviceability rating of no less than 3.0. All in all, these ratings are pretty high considering that today our average pavement serviceability rating in New Mexico is 1.73.

The warranty costs us \$62 million, which comprises \$60 million for the pavement warranty and \$2.0 million for erosion and bridges. At the same time, we calculate that over the 20-year life of this project, the warranty will yield net savings of \$89 million. We performed the calculation by estimating what it would cost us to deliver the same level of performance on this roadway, for this period of time, over that distance. We believe that our cost would be \$150.9 million—in today's dollars. On this basis, we believe that a \$62 million investment in a long-term warranty provides an excellent return for the taxpayers. Admittedly, the short-term politics of the decision are tricky, since some will argue that we could have put that \$62 million into another road somewhere else. But the long-term politics of it cannot be beat. We are saving money over that 20 years that will become available to the department for other projects. We believe that this is an excellent deal.

I would also add that the developer, Koch Industries, has had to post a \$50 million bond of its own revenues on top of the \$62 million we paid it. So the developer has some built-in costs as well.

Next I would like to talk about the New Mexico Roadway Performance and Planning Matrix. I believe this is an awesome tool for us, and while it may not be very interesting to a lot of the financial people here, I think those of us who have to operate a highway system will see its tremendous benefits.

Here is the situation we are dealing with. The state of New Mexico covers 316 000 km<sup>2</sup> (122,000 mi<sup>2</sup>), meaning that we could take the states of New York, Pennsylvania, New Jersey, Maryland, Massachusetts, Connecticut, and Rhode Island and fit them in with 2600 km<sup>2</sup> (1,000 mi<sup>2</sup>) to spare. And whereas those states have a population of about 53 million, we have

a population of just 1.7 million. This gives you an idea of how vast our state is and how low our population densities are.

We ran into a problem because we have ostensibly adopted AASHTO standards for our whole system, meaning that the entire 19 000-km (12,000-mi) system is supposed to be maintained to this level, regardless of the kind of highway. That just does not work for my state, and my guess is that it does not work in your state either. So here is what we did. We went onto our system and we looked at every single mile. We compiled a list of corridors that encompasses every mile of our system, so we no longer need to think in terms of 8-km (5-mi) projects and 100-km (60-mi) roads. We asked ourselves how each corridor functions within our state and our multistate region. We then ranked each corridor in six priority categories, Priority 1 (high) to Priority 6 (low).

Next we developed a matrix that aligns these priority corridors against performance criteria related to individual roadway elements comprising pavement and surfacing, traffic operations, and roadside features. On the basis of those criteria we can develop a composite rating for each element. For example, pavement ratings can span from 0 for a truly awful pavement up to 35 for an excellent pavement. What is critical to the process, however, is that these ratings work on a sliding scale, so that a rating of, say, 11 might be a failing grade for a Priority 1 corridor but perfectly acceptable for a lower-priority corridor. This gives us a way of knowing what level of performance these various corridors should be targeted for.

I should also note that the corridors' priority listings work with different types of published standards. This means that for existing geometric design standards, we have determined to adhere to current AASHTO standards for almost all corridors, all the way down to the fifth priority ranking. We will also meet AASHTO safety guidelines for most of our corridors. For congestion, we have identified target level-of-service ratings for each of the six corridor priority rankings.

Our districts will be doing these evaluations and coming up with numbers to determine the level of service we are currently providing. For instance, we will know where we stand on vegetation management for each of the six priority categories of corridor. We will then compile an assessment sheet by mile marker for every road. This will allow us to determine what treatments are needed and help us align these treatments with the amount of funding available for those activities. In essence, this matrixed approach to condition assessment and investment decision making will provide a focus, and boundaries, for the entire organization. It gives our district engineers and other people

within our organization a target to shoot for, and it allows them to separate out those requests for services that are neither financially feasible nor reasonable given the condition of the overall system.

We believe that this is going to be a fantastic tool for us and would welcome the opportunity to share it with you.

## LIFE-CYCLE PRICING OF CAPITAL INVESTMENTS: SHADOW TOLLS

*Ray Tillman*

As we all know by now, a shadow toll is a per-vehicle amount paid to a facility operator by an entity other than the facility users themselves. The total payments to a facility operator are proportional to facility usage, and they are spread over an extended period, possibly corresponding to a concession or franchise duration. The use of shadow tolls allows a public project sponsor to transfer traffic risk to a developer/operator. Multiple sources of funding can contribute to a shadow toll fund from which toll payments are made, and project cost obligations can be largely known and guaranteed in advance (provided that traffic forecasts are reliable).

Shadow tolls thus can make sense in any or all of the following circumstances:

- It is appropriate to transfer traffic risk to a developer/operator.
- Competing design/build/operate proposals (discussed below) will affect actual traffic levels.
- Life-cycle costs strongly reflect operations and maintenance components, which are often driven by and proportional to traffic volumes and characteristics.
- There is a need to spread payments to operators over a number of years on a usage basis.
- There is clear political appeal to the concept of shadow tolls—that is, it must be clear that a developer is not getting a windfall and is paid in rough proportionality to the benefits (i.e., traffic) that are actually produced or served by the facility.

Examples of actual “full-blooded” shadow toll use are rather sparse, but there are a few. First, the Highways Agency of the United Kingdom has entered into several 30-year DBFO contracts. The DBFO entity is paid by shadow tolls based on actual traffic volumes; these payments come from general funds of the government. The risks transferred to the DBFO under this U.K. program are those related to construction cost and

delay; latent defects in the construction, a consideration often not addressed in the United States; and actual traffic levels, though these are often not affected by DBFO actions other than lane closures during rehabilitation work.

As a second example, the E-470 Authority in Colorado issued bonds earlier this year that included a developer-funded interchange at Gartrell Road. Whereas the authority will pay the developer back in the 2005–2022 time frame, the developer is paying the authority a shadow toll for all vehicles using this interchange before the toll system is operational.

Third, the province of New Brunswick is ending tolls on the Fredericton-Moncton Highway and is using shadow tolls to pay the agency servicing the initial debt. The builder, the Maritime Road Development Corporation, should come out whole; political reasons largely contributed to the decision to replace “real” tolls with shadow tolls.

Another similar financing concept was analyzed by URS on behalf of the New York State Department of Transportation. The study evaluated creation of a transportation development district, whereby improvement costs for a section of highway (Route 211 in Orange County, New York) would be distributed as special multiyear tax assessments over just those properties that were generating significant traffic that would use and benefit from the contemplated improvement. The analysis determined the distribution of future trip ends and calculated the assessments accordingly. This would not have been a shadow toll as we have defined it previously, since the beneficiaries themselves are paying through special assessments. Still, there is a parallel, since the beneficiaries are not paying at the actual time of use by means of real tolls. They would have been paying proportionally to estimated usage as a specially calculated tax assessment.

Elsewhere, several state laws permit highway developers to propose routes for new highways to state governments rather than merely responding to RFPs of governmental agencies. In this case it is most proper for the developer to be compensated (fully or partially) on the basis of traffic attracted to the route that the developer is proposing. Shadow tolls are an ideal basis for this; if the proposed routing attracts high levels of traffic and thus better serves the public, the developer is entitled to a better return. The converse is also true.

In a DBOM procurement, the issuer should frame the RFP and selection criteria on the basis of life-cycle costs. Operating and maintenance costs will be a major element of the total life-cycle costs, especially if the lease period extends for 30 years or more. Since traffic projections lose a bit of precision that far in the future,

and increased levels of traffic will result in increased operating and maintenance costs, payments partially reflecting actual traffic volumes are most reasonable. It is logical to have fixed payment components proportional to debt service, variable payment components proportional to operating and maintenance, and other costs varying with traffic volumes and composition. The variable component is a shadow toll.

There are two basic scenarios for a shadow toll. In the first, the developer handles design, construction, operations, and maintenance, but a project administrator is responsible for financing. The administrator might be a state department of transportation, a toll agency, a county, another local or state jurisdiction, an economic development authority, a SIB, a 63-20 corporation, or the like. It is important to note that there can be multiple funding sources providing revenues to the project administrator so that shadow tolls can be covered. With the administrator responsible for financing, the construction contract can be handled traditionally, with the O&M costs based on a shadow toll agreement.

Under the second scenario, the developer rather than the project administrator is responsible for financing. In this instance shadow tolls could be used to finance the initial construction as well as continuing operations. It is to be emphasized that shadow tolls are a payment or fund disbursement method; they are not by themselves a source of funds. Other revenue generators must be identified and used to supply the shadow toll kitty.

It is useful to note that project debt backed by shadow tolls, if properly structured, can be tax exempt, creditworthy, and immune from traffic elasticity factors. Tax-exempt status is assured by having a governmental entity or 63-20 corporation serve as the issuer of debt and administrator of the project. If the underlying funding sources are creditworthy, then the shadow toll-based financing will, in all likelihood, also be considered creditworthy. And since actual users of the facility will be largely unaware of changes in shadow toll levels, there will be no resulting traffic level variations.

Since other speakers on this panel will touch on developments concerning GASB 34, I will simply note the potential for the use of shadow tolls as a practical funding mechanism for GASB 34 programs. As an illustration, the contemplated Massachusetts Route 3 project financing may commit a share of that state's future federal apportionments to fund the Route 3 project. This provides a major new spin on the shadow toll concept, since future federal grants could provide a valuable revenue stream to support shadow toll payments spurred by increased infrastructure maintenance.

## INTEGRATED STATE AND LOCAL STRATEGIES FOR ASSET MANAGEMENT FINANCING

*Thomas McPherson*

**T**oday I want to talk about the principles of asset management as related to our experience in Ohio. I will provide some background on how the Ohio Department of Transportation (ODOT) has progressed over the past decade, as well as some information on our existing asset base and our partnerships with local governments.

I look at assets from a statewide perspective, and I think ODOT has played a leadership role in helping manage transportation assets all over the state, including highway, transit, rail, and waterway infrastructure. We all know how those work together, but unfortunately, the standard funding mechanisms sometimes force us in the direction of the wrong solutions. I cannot tell you how many times we have faced situations where the real solution was something other than widening a lane, but no money was available for the reasonable alternative.

As we get into the decision-making process, good data are crucial. We in Ohio are still working on that problem, since we still have a lot of bad data, data that refuse to talk to each other, and data that are prepared inconsistently. I hate to admit it, but we have some data prepared to make our performance measures look good. Surely no other states have this problem!

The scarcity of financial resources amounted to one of the primary reasons why we at ODOT got into asset management. Our gasoline tax is flat and consumption was growing very little. The use of ethanol, which is taxed at a lower rate, is on the rise. And we had \$7 billion worth of new construction projects in the pipeline and only \$300 million per year to spend. We faced political pressures, as well, that dictated what would be built and when. Again, I have a feeling that these circumstances are not unique to Ohio.

We at ODOT also had an unfocused workforce. Staff came to work every day and they did something, but they were not really sure why. Our operations were highly centralized; all the decisions were made at the top. Some people never saw the senior leadership throughout their entire 25-year careers, even though we were making all the decisions for them. We had no real planning to guide our investment decisions, despite compliance with all statutory planning requirements. And finally, we did not have system performance standards. This meant that we did not know how bad our congestion was, nor did we know about our pavement conditions. We knew that we should revisit 10 percent of the system and 300 bridges each year, because that

was the life cycle. But we did not necessarily know which ones.

By 1994 some people were saying that ODOT was beyond repair, and that was about the time we turned to asset management. Since that time we have seen real improvements. In 1994 ODOT had 7,800 employees and we were completing about \$650 million in construction each year. Last year, we had 6,100 people doing \$1.1 billion in construction, so we are definitely doing more with less. Have we optimized yet? Absolutely not, but we see definite improvement.

By making more effective use of our human resources and improving our processes so far, we have been able to put \$550 million back into pavement, bridges, and the system as a whole. That is through efficiency—no layoffs, no new money. We have done some leveraging through bonding, have set standards for pavement and bridges, and are regularly assessing performance.

Our asset base includes 210 000 km (130,000 mi) of highway, 50 000 km (30,000 mi) of which are on the federal-aid system, and 43,000 bridges, with the state responsible for 73 percent, or 9500 m<sup>2</sup> (102,500 ft<sup>2</sup>) of total bridge deck area. We have 148 rest areas, 11 travel information centers, 5000 km (3,000 mi) of bicycle paths, 10 000 km (6,000 mi) of railroad tracks, 4,000 public transit vehicles, and more than 200 county and municipal airports. That is a lot of infrastructure to keep moving and to keep in good shape.

We have prioritized our system to help us make better investment decisions. We have identified all of the corridors, so we are doing much better at targeting funds to where they will do the most good.

I want to talk about a few of our efforts in asset management. We established a number of strategic goals, including, for example, congestion reduction in urban areas. We also established supporting objectives. For the strategic goal related to congestion reduction, for instance, the supporting initiatives relate to incident management, access management, use of high-occupancy vehicle lanes, deployment of ITS technologies, better coordination and application of transit alternatives, and more effective use of the rail system. These are the things we think will demand attention as we seek to reduce congestion, and we hope especially to zero in on those that hold the greatest promise in achieving that strategic goal.

Another key piece of our approach to asset management is ODOT's commitment to working with local governments and communities. We have established a division of local governments, published a local programs booklet that actually makes sense, conducted meetings with local officials, provided training opportunities on pavement and bridge assessments, and invited more local participation in the urban projects we fund.

In closing, I want to stress that SIBs, the TIFIA federal credit program, and other innovations discussed at this conference can be useful as we start to focus more heavily on the returns on investment that we achieve. Ohio has had some good success in that area, and I believe it goes hand in hand with our new approach to asset management and our overall emphasis on efficient and responsive project delivery.

## GASB 34'S IMPACT ON ASSET MANAGEMENT POLICIES

*Daniel Dornan*

**I**n this session I would like to talk about asset management as it relates to innovative financing. To lead off with a bit of history, let's consider how the federal government has traditionally provided financial support for our highway infrastructure. The focus has clearly been on construction and rehabilitation, with state and local governments responsible for maintenance. This has created an inherent bias in terms of how funds are spent. If all the funding and political rewards steer you toward cutting ribbons, you are going to put heavy emphasis on construction and fairly little on preservation. After all, if you as a state or local government have to use your own money for maintenance but can get 80 or 90 percent federal funding for construction, why not wait until a given facility fails and then replace it with cheap federal funding?

The result has been premature obsolescence of the nation's highway infrastructure. This has led to significantly higher life-cycle costs because of having to replace assets sooner than would otherwise have been necessary. Premature obsolescence creates other costs, as well—think of the impacts of the congestion, delays, and accidents associated with prematurely aging infrastructure. If infrastructure needs outpace available resources, we need to do something about the costs imposed by deferred maintenance and premature capital replacement.

The public plays a role here as well. Citizens are increasingly demanding fiscal responsibility in terms of what programs they are getting and how they are being managed. They are also increasingly focused on service and performance indicators, so we now have the basis to start thinking about the asset as more than a ribbon-cutting opportunity.

Now, a lot of people view the enemy of infrastructure as the trucking industry, arguing that heavier and more loads on the Interstates cause the infrastructure to deteriorate more rapidly. But no one really talks about

other culprits. Consider, for example, the sport utility vehicle (SUV). I do not know whether people realize that the majority of vehicles sold to the American public today are classified as trucks. The average SUV weighs about 2 tons, double the weight of the typical sedan, with gas consumption to match. Has anyone thought about the fact that you are actually putting a lot more weight and stress on the roads, not just because of trucks, but because of the way we drive in general?

What is the next step? There has been a lot of talk about innovative financing. You have special assessment districts that help local developers and adjacent landowners pay for improvements. You have dedicated sales tax increments, different kinds of contracting, and GARVEE bonds. One of the consequences of innovative financing is that you are bringing more people to the table, with greater sharing of risks, responsibilities, and rewards. By leveraging federal funding to provide more resources, you also provide greater fiscal responsibility and accountability at the state and local levels. But, to some extent, you also diminish the federal government's ability to dictate what is going to happen with those funding arrangements, how resources are to be used, and the best way to use those resources, particularly if you are thinking about life-cycle costs and obligations.

Another consequence of innovative financing is a shift in emphasis from asset development to asset management. This shift is underscored by the introduction of the private sector, and particularly the private financial community, through project financing. If you have ever read bond covenants and indentures, you have seen that they imply fiscal responsibility of a private-sector nature, including that operations and maintenance come first, not capital improvements. The result is a reversal in emphasis and priority between capital and preservation programs.

Enter GASB. What is GASB? It is the Governmental Accounting Standards Board, which some people view as an entity bent on giving accountants some business. But in fact it is a bunch of folks, typically outside the infrastructure community, who set accounting standards for all 84,000 state and local governments in the United States [known as Generally Accepted Accounting Principles (GAAP)]. GASB is not a federal agency, and it has no enforcement authority. GASB's power lies in the fact that if financial statements do not comply with GAAP, rating agencies are inclined to start asking questions and viewing the debt issued by a given state or locality as more risky than originally thought. Consequently, debt-based financing costs can go up, and the consequences of GASB's standards start to hit pretty close to home.

Recently GASB noted that infrastructure worth trillions of dollars has been absent from governmental

financial statements in the past, which in turn has produced a serious misstatement of the asset bases of public agencies. As a result of that finding, there was a unanimous vote in June 1999 that approved a new set of financial reporting standards for state and local governments, known by the shorthand of "GASB 34." GASB said that if you do not know what your asset base is, you tend to feel less responsible for it, making it even easier to take the capital money and forget the facility thereafter.

More specifically, the statement says that you have to identify, value, and report the depreciation of long-lived infrastructure assets. When the statement was still being formulated, engineers noted that the word "depreciation" sounded an awful lot like "deterioration," which surely does not happen. Or does it? Ultimately, GASB and representatives of the infrastructure community compromised; as an alternative to reporting depreciation, it would be possible to report the amount spent to preserve the infrastructure at a predefined condition level.

Regardless of whether a jurisdiction opts for the depreciation or the preservation approach, the key elements of what GASB is asking for are as follows: (a) you must identify what assets you own, (b) you must estimate the value of those assets, and (c) you can do this either on the basis of historical construction cost or replacement cost discounted to the date of last improvement. It sounds pretty simple except if you are talking about an asset that is about 70 years old.

Then comes the fork in the road. If you choose to report depreciation, that is pretty simple: you just divide the value of the asset over its expected life or do some kind of accelerated depreciation if you wish. If you opt to report on preservation, GASB said you could not just name a dollar amount; you actually have to prove you are doing what you say. This underscores the importance of defining the desired standard of performance and level of service. Regardless of the performance selected, you need to evaluate your assets against that standard every 3 years and report on what you spent to keep it at that standard.

However, if I can make one point to you today, do not use GASB 34 as the only reason to do asset management. Consider GASB 34 as a potential ally when you seek to convince decision makers or your legislature of the value of asset management, even though there may not be any immediate and visible political payoff. After all, research has indicated that by doing good asset management you can reduce life-cycle costs of infrastructure by 75 to 90 percent as compared with deferring maintenance.

There are clearly disadvantages to ignoring GASB 34. As mentioned before, the cost of a potential downgrade to your credit rating is not to be taken lightly. But I would suggest that the carrot side is a lot more inter-

esting and important to consider. GASB 34 allows you to reduce your life-cycle costs for infrastructure, which means that you can save a lot of resources downstream to use not only for new infrastructure investment but also for other purposes.

GASB 34 may provide other opportunities that are not immediately obvious. If state and local governments are being held more accountable for how they maintain their assets, why should they be happy to sit by and just get federal funding only for capital improvements? I believe that one of the consequences of GASB 34 may be revision to federal highway and transit legislation whereby funds can be used not just for capital improvement but for asset preservation and rehabilitation as well.

Another opportunity associated with GASB 34 is infrastructure securitization, whereby a public agency issues bonds to pay for the implementation of asset management systems and the cost of critical infrastructure rehabilitation. These bonds could be secured by the value of the asset and the significantly reduced life-cycle costs associated with asset preservation efforts. Shadow tolls could be used to ensure that these cost savings are captured to support the required debt service payments that would accrue. Securitization would allow public-sector agencies to realize in the short term the benefits of long-term asset management of infrastructure. This is a critical prerequisite for the major benefits of GASB 34's infrastructure reporting requirements to be realized—providing the opportunity to make the benefits of asset management tangible to today's politicians and infrastructure program decision makers. Otherwise, GASB 34 will become just another unfunded mandate, with state and local governments taking the easiest route to compliance—depreciation reporting.

The third opportunity associated with GASB 34 that I would like to offer concerns the growing federal inter-

est in establishing a nationwide spatial database, using geographic information systems to map the nation's infrastructure. Federal agencies such as the Federal Emergency Management Administration, the U.S. Department of Transportation, and the Department of Defense have long sought a way to portray real-time information describing in mapping format the characteristics, capacity, and constraints associated with the nation's infrastructure. Such information would be extremely valuable for those involved in mobilization, emergency evacuation, and economic development planning and execution. GASB 34's requirement for state and local governments to document their assets may lay the groundwork for an open architecture system that links all this information together. Suddenly, you have the basis for a nationwide database on highways, bridges, and the like: their characteristics, their congestion levels, and their operating performance. Add ITS information to these data and you can get real-time utilization and navigation information, which would be valuable to many private-sector organizations as well (such as shippers, trucking firms, and vehicle navigation firms).

These examples indicate just a few of the many potential benefits that GASB 34 could indirectly generate. The key outcome that GASB 34 could have, if properly approached and implemented, is to relate more closely the inherent relationships between asset management and asset financing. These are mutually reinforcing functions that have been fragmented by the lack of public accountability of infrastructure agencies for the stewardship of their long-term assets. GASB 34 has the potential to end this fragmentation and encourage the integration of these functions for the benefit of all citizens—provided it is used by more than just the accounting departments to structure their financial reports.