
SPEED
LIMIT
65

Benchmarking: Valuable Tool or Waste of Time?

By Pat Louthan, Jeff Sade, and Kathleen Sharman

Much is made of benchmarking efforts designed to help similar companies gauge their performance against each other. The problem is that typical benchmark studies gather metrics at a high level – the cost of a violation, the margin of an AVI transaction, etc. – but lack the details to give validity and meaning to the comparisons between agencies. In fact, most benchmarks generate more questions than answers. But does it have to be this way?

What if the toll industry could create benchmarks for key transaction types, processes and activities that were truly comparable? And provide executives with the information needed to make critical strategic and operational decisions with profound positive impacts on the future of the agency.

The authors have successfully addressed these questions by applying a new approach to several tolling authorities. The approach we'll discuss has provided each agency with a depth of insight into their operations as well as the basis for meaningful toll industry benchmarks to make comparisons with other agencies. The remainder of the article will discuss the challenges to benchmarking in the toll industry and how to overcome those challenges.

What if the toll industry could create benchmarks for key transaction types, processes and activities that were truly comparable?

What is driving the toll industry's need for benchmarking?

The toll industry is facing a series of circumstances whose combined effect creates the need for a better understanding of the basic costs for transaction types, processes, and activities. Among the recent events are:

- **Rising maintenance costs:** The growing maintenance needs of non-tolled facilities and the resulting pressure on federal, state, and local governments to find the funds to support these maintenance activities has led to the privatization of some tolled facilities to generate immediate funds for current maintenance costs.
- **Toll facility expansion:** We are seeing the increased use of tolling as a funding mechanism because of the lack of federal, state, and local government funds to support growing infrastructure needs.
- **Electronic toll collection (ETC) interoperability:** There is major pressure to provide ETC interoperability across state and regional borders, creating the need for a better understanding of costs. (For example, what is the equitable chargeback for the maintenance of user accounts and other back office functions?)

These circumstances have raised a number of questions in executive offices and at industry meetings that we would like to address here.

- What are the margins associated with different toll collection transaction types (manual, automatic coin machine, ETC, video, etc.) and does one type provide a significantly higher margin than the others?
- How should an agency price processes and activities (for example, inbound support calls, violation notices, account maintenance, etc.) when used to support other agencies?
- How can an agency defend price increases with the governing board, government entities, and the public?
- What are acceptable operational and financial efficiencies and how can agencies use these measures to obtain favorable bond ratings?

Having an understanding of the industry costs for different transaction types, processes, and activities can play a significant role in senior management's ability to address these questions.

What has kept the industry from developing these benchmarks?

Benchmarking has long been a topic of conversation among IBTTA members and was specifically addressed during IBTTA's 2006 Organization Management Workshop in Seattle. During one workshop session involving a costing exercise, it quickly became apparent that nobody could develop a consensus on what costs should or should not be allocated to each type of transaction. Additional issues identified were:

- Agreeing on an allocation method (What portion of each cost should be attributed to different transaction types?);
- Reconciling for the size of an authority (by revenue, transactions, miles, etc.);
- Adjusting for varying organization structures (stand alone vs. integrated with the owning entity); and
- Accounting for varying accounting rules (Funds, Modified GASB, GAAP, etc.)

On top of the purely financial aspects noted above, other industry issues emerged such as: Who would have access to the data (bond rating agencies, the board)? And will the data generate answers or more questions?

The Workshop Results

The challenges identified above and summarized in Figure 1 are common to all benchmarking efforts and create frustration with the inability to address pressing information needs. The lack of visibility into a specific methodology that generates a benchmark number turns the focus away from taking action into a never ending spiral of questions aimed at determining if there are truly apples-to-apples comparisons being made.

The toll industry has several factors working in its favor that place it in a unique position to make use of benchmarking as a key tool in the future:

- A community of agencies that are well connected through IBTTA, common vendors and personal relationships;
- A common set of processes and activities that are shared across all agencies within the industry; and
- A general willingness to share information because toll agencies typically don't compete with one another.

Overcoming the Challenges

Activity Based Costing Is The Answer. The principles contained in Activity-Based Costing (ABC) provide the answer to the challenges identified in Figure 2. Resources (expenses) are assigned to activities, then activities are assigned to cost objects based on their use. Activity-based costing recognizes the causal relationships of cost drivers to activities and uses a precise method of allocation that is applied across any like agencies.

Bottoms-Up Approach and Layered Costing. Unlike most benchmark studies, using an ABC approach creates a foundation that forces a "bottoms-up" approach. It starts by building costs at a detailed activity level and builds the activities up into processes that then support certain transaction types. This approach can be supported by the development of an industry standard process classification taxonomy, or a common set of processes and activities along with standard allocation methods that are applicable across any toll entity.

Toll Road Taxonomy. A standard toll industry taxonomy is essential to creating usable and comparable benchmarks. Without this standard breakdown of activities, the benchmarking quickly becomes a discussion about apples and oranges. Leveraging work done at previous agencies, Agnitio Group and Louthan Consulting have developed a toll industry taxonomy that is robust enough to account for subtle and not so subtle differences between the operations of various agencies.

The Power of Attribution. Proper attribution of the model is the key to

Figure 1: Summary of Challenges

1. Lack of data granularity providing confidence of apples-to-apples comparisons
2. What costs should be included
3. Lack of standard methodology or agreement on allocation methods
4. Variability of normalization methods (revenue, transactions, miles, etc.)
5. Variability in organization structures
6. Variability in accounting structures (Funds, Modified GASB, GAAP, etc.)

Figure 2: Example ABC Structure

creating powerful results that enable analysis and pro forma model development. Attributes such as fixed/variable; direct/overhead; project/recurring; labor/non-labor; department; line item; cost type (fund); process and activity allow for innumerable ways to slice and dice the data to get to the information needed to make decisions. For example, our experience has shown that amortization & depreciation and interest expense costs need to be excluded from any inter-agency comparison in order to achieve valid comparison results.

Information Access. Having an independent third party develop the benchmark metrics keeps proprietary data proprietary while providing visibility into how each agency measures up to the industry's performance. The independent party can accomplish this by limiting access to the data to participating agencies; masking the agency name on any specific data; presenting data as ranges, averages and statistical measures; etc.

The Benefits of Having Comparable Costs

The Power of Knowledge. As knowledge of a subject increases, the ability to make consistently effective decisions on that subject increases exponentially. This is the primary use of benchmarking studies. If we can determine what the industry average and range of costs are for a particular activity or transaction type, it enables executives to make informed decisions. Depending upon where an agency is currently performing in relation to the processes and activities within the broader industry group, the information can support effective strategic and operational decisions.

For example, poor performance against an industry average will lead to process changes, technology improvement, and outsourcing opportunities to shore up the weakness. Good performance against a metric may lead to in-sourcing opportunities and redefined operational focus on other areas that need improvement.

> A standard toll industry taxonomy is essential to creating usable and comparable benchmarks. Without this standard breakdown of activities, the benchmarking quickly becomes a discussion about apples and oranges.

Having an understanding of the true costs of a transaction type allows executives to make informed strategic decisions.

It is also important to remember that while cost is an important piece of the decision process, it can be dangerous without the context of quality and time. The perfect example of this was the general finding that ACM transactions are highly profitable, but have a huge negative effect on traffic flow and quality.

By creating this level of detail about multiple agencies using the same ABC approach and standard taxonomy, an apples-to-apples comparison can be performed across transaction types, processes, and activities. And the true power of this approach is that it does not just produce benchmarks across agencies. It also operates as a stand alone tool internal to each agency that provides powerful analytical capabilities in its own right. This benefit, even in the absence of industry benchmarking, has been found to provide high value results that more than justify the effort required to do the costing project in the first place. Some examples of how agencies use the information created by this methodology are discussed below.

A Big Picture View Supports Strategic Decisions. Having an understanding of the true costs of a transaction type allows executives to make informed strategic decisions. This is especially powerful when coupled with revenue data to identify high and low margin transaction types.

Example: An agency was supporting the back office function of a neighboring toll facility with a contract based on a percentage of revenue basis. The results of the costing study clearly demonstrated that the agency was significantly undercharging the other authority for the support services being provided.

Flexibility to Layer. As discussed earlier, highly attributed cost allocations allow for analysis along multiple dimensions. Being able to look at information from its component parts allows visibility into discreet activities that make up a process, as well as the ability to sum up multiple activities into a process. This flexibility to slice and dice the data into multiple layers of costs and include or exclude various attributes (e.g. labor/non-labor, fixed/variable, overhead/direct etc.) supports a wide variety of analysis.

Example: An agency felt that their support services (call center, storefront, Internet, email and

paper correspondence) were being operated suboptimally. The costing model was used to strip out various non-essential resources to do a valid comparison between support channels leading to programs that optimized lower cost channels (Internet self serve)

Trending over Time. Using this modeling approach also allows an agency to perform *internal* benchmarking by developing cost trends over time. This allows an agency to measure the effectiveness of policy decisions and other changes that naturally occur within an organization. As changes are made and decisions are taken, the effectiveness of those actions will show as an adjustment to the financial trend.

Example: An agency was able to view cost trends over time to determine the impact of major construction on traffic volume and revenue as well as identify extraordinary activities that impacted the system during these events.

Pro-Forma Analysis. Pro-forma modeling utilizing the many output attributes of the data allowed our clients to measure the effectiveness of their decisions *before* making them.

Example: An agency, discovering that their violation policy was creating significant negative margins, was able to model the financial impacts of various alternative policy changes to determine

which changes optimized their financials while meeting their patron quality goals.

Pulling It All Together. Activity based models provide a rich source of data to mine for key indicators of performance for an agency. It allows for the creation of performance scorecards by selecting metrics that highlight those areas of most interest to the agency executives. A scorecard can be established with a focus on the agency's strategy and linked through select initiatives that have the full support of the executives and governing board. A scorecard can then measure the progress and effectiveness of initiatives that drive efficiency and overall performance improvement.

What Does All This Mean?

Is it possible to create meaningful industry benchmarks to address the issues raised by the costing exercise at IBTTA's 2006 Organization Management Workshop? The answer is YES! It is accomplished through the application of a well attributed activity based cost model that maintains the visibility of costs down to the activity level and uses a consistent method and taxonomy to assign costs. This model creates visibility of industry metrics at

The process of obtaining the benchmark data at any one specific agency leads to an in-depth understanding of the costs for that agency and opens up a powerful set of tools that can be used to support strategic and operational decision-making.

a low enough level to provide apples-to-apples comparisons.

Just as important as the industry benchmarking effort is, the process of obtaining the benchmark data at any one specific agency leads to an in-depth understanding of the costs for that agency and opens up a powerful set of tools that can be used to support strategic and operational decision-making.

Currently a few agencies are participating in a study focused solely on benchmarking the costs of customer service in the toll industry. With the conclusion of this initial pilot benchmarking study, an effort will begin to expand the metrics to encompass all aspects of toll operations. This increased analytical capability will help these agencies understand their costs better, thus enhancing decision making and improved service for their patrons.

Pat Louthan is the President of Louthan Consulting and can be reached at pat@louthanllp.com. Jeff Sade is a Principal Consultant with Agnitio Group and can be reached at jsade@agnitiogroup.com. Kathleen Sharman is Director of Finance for the South Jersey Transportation Authority and Chair of IBTTA's Administration Committee. She can be reached at ksharman@sjta.com.