WHITE PAPER

Issued 2016

Procurement.
It's everywhere.

TOPIC:

TOTAL COST OF OWNERSHIP: Realizing Procurements Full Potential in Value Creation

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Connecting Supplier Perspectives with the Public Procurement Community.

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NIGP Business Council: Who we are.

NIGP's Business Council is composed of representatives from each company participating in the Institute's Enterprise Sponsor Program. Enterprise Sponsors span a wide range of products and service categories and are leaders in their respective industries and have demonstrated a shared commitment to NIGP's values: Accountability, Ethics, Impartiality, Professionalism, Service, and Transparency.

The mission of the Business Council is to

> **Serve the NIGP membership and procurement profession through the sharing of resources and business expertise in support of NIGP's educational, research and advocacy mission.**

In essence, the Business Council connects the supplier's perspective with the public procurement community and is dedicated to improving the buyer/supplier relationship.

White papers represent one of the ways in which the Business Council supports the educational mission of NIGP.

Connecting Supplier Perspectives with the Public Procurement Community.

May 6, 2016

Public Practitioners, Suppliers, and Interested Readers,

Last year's NIGP Business Council's white paper, The Healthy Agency-Supplier Relationship Guide, provides a pathway toward engaging the Supplier community in creating value for agencies through a better understanding of the general markets, products and services. The objective of the dialog is to conduct more conversation in advance of solicitations and procurement decisions. Additionally, we provided recommendations around Supplier Performance Management.

This year's white paper topic makes the assumption that the top performing agencies are moving to a best value procurement model, have favorable engagements with their supplier communities and are looking to codify their desired outcomes with a repeatable process.

In support of these objects the NIGP Business Council has selected the topic of Total Cost of Ownership (TCO). TCO provides agencies a process that when used appropriately, better defines the opportunities, evaluations and decisions around the acquisition of products, service and services. TCO provides an invaluable tool for setting and measuring expectations.

Value Based Procurement and TCO combined together will eventually lead to the total cost of use. Having a transparent TCO provides the information to make clear and decisive decisions along with being able to provide the results to the supplier community and the public at large. Including TCO into the procurement process will enhance the budgeting and payment processes.

It is an honor and privilege to serve as the NIGP Business Council Chair and to have the opportunity to interact with so many talented, intelligent, and dedicated individuals who make the white paper and other activities possible. Thank you to the Business Council, the NIGP membership, NIGP staff, and Public Procurement Practitioners.

Sincerely,

Paul T. Murphy

Paul T. Murphy
2016-2017 NIGP Business Council Chair
Director, Contract Strategic Support, Canon Solutions America, Inc.

Introduction

Since 2013, the NIGP Business Council has produced three white papers that explored some of the primary reasons suppliers decide not to respond to a request for proposal/invitation for bid (RFP/IFB), examined recommended practices that procurement professionals should consider when developing an RFP/IFB, and looked at ways procurement professionals and the supplier community can improve communication and outcomes. The response to NIGP's three white papers has been very positive.

This year, we are focusing our white paper on the total cost of ownership (TCO) approach to procurement. Though widely used in private market procurement, TCO remains underutilized in government procurement where a large number of agencies still select suppliers based on price rather than looking at the full value a supplier can bring to help them achieve sustainable and long-term cost savings. By examining this topic, we hope to increase awareness and educate procurement professionals about TCO, drive change in some current government procurement practices, find ways to help agencies introduce TCO concepts into their procurement processes, and move toward long-term sustainable cost savings strategies rather than focusing on short-term benefits and selecting suppliers with the lowest price.

In its position paper *Best Value in Government Procurement* NIGP defines TCO as "a measure of all of the cost components associated with the procurement of a product or service. The sum of all fixed and variable costs attributed to a product or service. A philosophy for understanding all supply chain related costs of doing business with a particular supplier for a particular good or service." These costs, then, are balanced and measured against the future benefits or returns resulting from acquiring goods or services.

In procurement, price is merely the specified amount for a product or service and is only a fraction of the total cost an agency will incur when purchasing a product or service. To gain a complete picture of an agency's total investment, other indirect costs associated with procuring a product or service should be evaluated. These costs and benefits may include the cost to acquire, operate, or maintain an item; a product's expected lifespan; benefits to the local economy; and the cost of insurance and of financing and disposing of an item. By implementing TCO practices on a regular basis, agencies can determine the overall lifecycle cost of a product or service, dig deeper into the performance metrics, compare and contrast different variables associated with ownership, integrate sustainability into the procurement process, and assess the ongoing costs of a specific purchase.

TCO not only provides value to purchasers, it can affect everyone in the procurement and supplier communities from the procurement team, to field operations, accounting, management, end users, suppliers, and manufacturers. From the procurement perspective, TCO aligns directly with the goals of public procurement professionals. It broadens the effectiveness of procurement beyond the sole function of sourcing goods or services and enables them to be business-minded professionals who understand how to support their civic duty as a public procurement professional. TCO can drive long-term and sustainable cost savings for the agency and provide and facilitate best value in selecting goods and services. It also allows procurement professionals to incorporate private market best practices into government processes and enables effective supplier relationships and partnerships.

From the supplier perspective, TCO enables them to provide added value and benefits to agencies that in some cases may not have been included in prior decisions. When a supplier integrates TCO with value, the supplier may be acknowledged in the marketplace as the provider who can offer the best overall solution and represents the best value. At that point, TCO benefits the agency and the supplier and further helps them develop a true partnership that leads to best value for both entities.

In this white paper, we explore the value of TCO in procurement, how agencies can apply it in their procurement processes, and the benefits it can bring to an agency and its taxpayers. We also address how the regulatory environment can impact an agency's ability to use TCO in its procurement process and look at one example where a state changed its procurement regulations to enable the use of TCO in procurements and evaluation criteria.

Since TCO mirrors many best practices from highly successful commercial firms and other non-governmental organizations (NGOs), we have translated some private market best practices to public procurement and included examples of these best practices. We have also provided readers with takeaway reference guides they can use and adapt to meet their own needs.

Value of TCO in Procurement

From NIGP's Procurement Dictionary:

> **Value:** *a set of attributes and expectations meaningful to the organization; a fair return on investment*
> **Best Value:** *An assessment of the return that can be achieved based on the total life cycle cost of the item; a procurement method that emphasizes value over price. The Best Value might not be the lowest cost.*

Determining what Value Means to your Agency

Agencies can use TCO to realize each procurement's full potential through value creation, but to achieve best value, each agency first must determine what value looks like to them. To begin the process of quantifying value, agencies need to identify stakeholders and conduct a discovery phase, leveraging and engaging all end users in the process. As a group, they can break value down into product cost categories (not just the price paid), which includes availability/delivery, environmental impact, asset management, end user customer satisfaction, product capabilities, process improvements (technology), risk mitigation, and other factors. Then they can determine whether value is

- The product's cost, availability, efficacy, and timely delivery,
- The supplier's ability to provide training and support, responsiveness, experience, and references,
- Benefits or gains over the life of the product, not just in the first year,
- Other issues that need to be considered.

Different agencies hold different value assessments, so suppliers need to learn what the term “value” represents to each agency. This understanding may not result from one meeting with one individual. In many cases, suppliers glean this information from notes and ideas presented by different departments and different levels of the organization. But suppliers need this information to know whether they can meet the agency’s vision of value, both tangible (bid costs of products, location of procurements, delivery dates, or project completion timeline) and intangible (service contract agreement satisfied properly, overall performance), and how they plan to integrate that value proposition. With this information, they should be able to explain to purchasers how their solutions will lower operating and maintenance costs, save time, or improve quality.

The Evolving Role of Procurement

In recent years, the procurement professional’s role has evolved from conducting tactical procurement functions to managing a strategic supply chain. Based on elements of TCO, sourcing decisions today place greater emphasis on long-term sustainable solutions and less on short-term transactional procurements. Procurement professionals using TCO can ensure they have purchased quality products and services and mitigate business risks. By accumulating the costs associated with each of these aspects, they have a new method to make sourcing decisions. Adding the costs of all elements associated with the procurement helps to more closely define the TCO.

Below we illustrate the difference between a basic tactical procurement and a strategic procurement as seen in today’s marketplace:

Tactical procurement: A city engineer has a water project to put out for bid and asks the procurement team to release an RFI for potential suppliers’ qualifications. Once the suppliers’ list is narrowed based on their qualifications, the procurement team is asked to release an RFQ for the project.

Strategic procurement: The city’s engineering and operations teams meet with the procurement team to discuss upcoming and planned projects. The teams share an overall plan and review each project's funding/timeline, approved materials, and specifications lists to identify potential savings in material needs and the use of any alternative products the teams may have identified separately. Savings that can be identified, analyzed, and tracked include inventory reductions, sale of obsolete products, EDI process savings (replacement of paper), access to new technology and training, lead time analysis, emergency services analysis, E-commerce web services/environmental sustainability, communication, risk mitigation, more efficient and responsive delivery, product quality, references and experience, and the availability of part number interchange to make it easier for employees to use online tools. What may appear to be best value to engineering may not be best value to operations. Best value to the procurement team on price may not be the best alternative product to provide the most comprehensive approach to overall long-term maintenance, repair, and disposal costs.

The collaboration between teams empowers everyone involved to incorporate best practices and best value in the procurement. In this discovery phase the teams also identify how decreased costs will be evaluated and passed on to taxpayers or consumers. In some cases, costs may also be further reduced by including suppliers in the strategic planning stage to introduce a greater number of new or alternative solutions.

The discovery phase is absolutely integral to the city's RFP and to the potential suppliers in this type of assessment. The RFP must make clear that all city specifications must be adhered to and a minimum/maximum safety stock must also be established and readily available. From a supplier's perspective, if there are any areas where the specifications are unclear, they must obtain written clarification before bidding to ensure their costs are correctly covered and to stock and supply the correct materials.

Suppliers significantly increase the value they offer when they shift from responding to a transactional demand (solicitations, quotes, and bids) to offering alternatives and solutions for purchasers to consider. However, the real leap in value for both the agency and the supplier is achieved when the supplier is strategically creating value for all parties—when agency and supplier value is balanced and both parties realize a high return on investment.

Value is maximized and price becomes less important as the focus of the procurement becomes managing risks/benefits in realizing the benefits of delivering high value outcomes.

Moving away from transactional selling is often called "solution selling." The concept of solution selling is valid only if it is preceded by a consultative approach to understanding the actual problem that needs to be solved. Solutions are an integral part of strategic selling but no strategy can be effective without trust, value, and excellence in execution. And, in return, to get the best value for their dollar, not the best price for each transaction, procurement officials need look for ways to use "solution buying," which may require changes in legislation to enable TCO.

If an agency has an assessment model in house that suppliers can use in their RFQ response, then suppliers can illustrate and validate their TCO and best value proposition. This is one way a supplier can provide a return on investment assessment. But if the agency does not have an assessment model for ROI, they may ask suppliers to provide one in their own format using information from the agency.

Sustainable, Long-term Cost Savings Strategies

We recognize that agencies' ultimate goals are sustainable long-term cost strategies and benefit gains even though they may have competing and conflicting priorities that prohibit them from reaching those goals. In many cases, focusing on short-term needs, which may result from funding pressures or infrastructure emergencies and failures in need of immediate attention, can interfere with long-term sustainable cost savings and benefit gains. The dysfunctional aspect of long-term sustainable targets is that at times they conflict with the short-term fiduciary and economic "need it now" environment at an agency that lacks funding for better long-term results. Still, agencies can add steps in their processes to achieve sustainable, long-term cost savings and benefits. During the discovery phase, for example, procurement professionals can ask themselves:

- What is the agency's business case for sustained benefit gains?
- What do cost savings look like?

- Is it inventory carrying cost reductions or, better yet, elimination?
- What are the agency's priorities as outlined by their leaders?

An agency can begin by focusing on several of their top priorities, large or small, and work from there.

Integrating TCO into the Procurement Process

To integrate TCO into a procurement process, it is recommended that procurement professionals evaluate and consider all true costs and benefits including ancillary supplies, products, and services in support of the product or service being procured. Depending on the type of procurement, there are a number of variables to consider when looking at TCO including non-cost items; the needs of end users; demand; delivery/lead times; on hand inventory levels; product breadth, depth, and assortment to enable the agency to reduce suppliers; invoicing; the number of deliveries to manage; product shelf life; preventative maintenance to extend product life; payment terms; and ongoing measurement. In addition, procurement professionals will want to engage the various departments within the agency to perform a spend analysis and spend mapping.

For example, for technology procurements costs include the amount of time necessary to train staff on the software, implementation costs, staff time and effort incurred with software testing and upgrades, and necessary change management efforts that are important for successful implementations. An additional aspect that can be key in determining the overall TCO is the product's anticipated lifespan. Estimating and calculating the anticipated lifespan can also serve to justify the intended acquisition. By distributing the initial system and implementation costs over the life of the anticipated solution, the true financial impact is lessened and the benefits accelerated.

Steps to Incorporate TCO

- Begin the process by researching the data available to determine your criteria for TCO. Reach out to the end user or department requesting the product to determine their needs and to suppliers to find out what type of data is available.
- Create a specifications template to solidify the criteria you identified for evaluating suppliers' responses.
- Solicit data from suppliers by sending them the template and a timeline for its completion.
- Research the suppliers' solutions and check their references.
- Upon receiving the completed specifications template, make a decision based only on the agreed upon criteria and the data provided.
- Use a state, local, or existing alliance or cooperative purchasing contract to reduce the cost of the procurement, expedite the procurement process, and leverage pricing.
- Issue an RFI/RFP to allow other criteria to be used if the agency is unable to use an existing contract.

Below is a sample template from a utility that uses a Vendor Management Inventory format with TCO in mind to procure standard use materials. After the utility announces an RFP, they award an annual contract to a supplier to manage standard inventory needs.

VENDOR MANAGED INVENTORY (VMI) COST SAVINGS ANALYSIS	
Process	**Total Cost**
Processing cost per purchase order	$18.75
Number of purchase orders (POs)	1,500
VMI annual cost savings PO processing	$28,125
Costs to process an invoice	$33.60
Annual number of invoices processed by this vendor through VMI	1,000
Overhead (rent, property taxes, utilities)	$44,500
VMI annual cost savings on invoicing	$78,100
Average work time per year in hours	2,080
Warehouse average hourly wage	$28.00
VMI savings labor	$58,240
Total annual savings VMI	$164,465

Here is another sample template from a state performing TCO/life cycle cost analysis comparing two different types of flooring to install in a gymnasium.

LIFE CYCLE COST ANALYSIS

Source: Capital Acquisitions, Lawther and Adler, NIGP 2006 p.44

COST COMPARISON OF GYMNASIUM FLOORING		
Life Cycle Cost	Maple Flooring	PVC Flooring
Installed Cost	81,300	65,000
Life Expectancy	38 years	15 years
Annual Installed Cost	2,139	4,333
Daily Maintenance (Mopping) 174 hrs./yr. @ $12/hr.	2,038	2,038
Bi-Weekly Maintenance (Scrub with chemical cleaner)	0	1,848
Quarterly Maintenance (Scrub and recoat)	0	1,230
Annual Maintenance (Screen and recoat)	2,800	1,966
Major Maintenance (Refinishing: $10,700 every 10 yrs.)	845	0
Total LCC Annual costs =	$7,872	$11,465

Below are some key variables to consider when preparing to purchase specific commodities and/or services. Though they may vary by procurement, additional considerations for TCO may include costs for hardware/software and maintenance, staff training, upgrade time, change management and comprehensive implementation, and a subscription and/or license.

Delivery costs: Often delivery that is *free* can be a misnomer—it really means the delivery cost is built into the price of the product. Having items picked up for free locally or delivered the same or next day from a local supplier can take any delivery lag out of the orders. But don't forget about the time spent driving to pick up an item. You may want to consider adding employee time/hourly wages to the cost of purchasing that item.

Disposal costs: Procurement professionals must consider the costs or revenue associated with disposing an asset when it is no longer needed. In some situations, the asset may retain some residual value and its sale may generate revenue for the agency. In other cases, the asset may have no residual value and the agency must bear the cost of its proper disposal. Disposing hazardous material requires special consideration, as the federal rules are very strict and fines for violation costly. Because of the increased level of responsibility assumed for hazardous material, its disposal costs may be higher than costs for non-hazardous material and should be considered when determining the TCO of any commodity in that category.

Environmental concerns: Citizens today demand that government play a proactive role in protecting the environment for future generations. Environmental issues impact all phases of the procurement system and are of great importance to procurement professionals. One of the ways agencies can promote environmental responsibility is to encourage "value purchasing" of environmentally preferred products, in which the total cost to the environment is included in the value formula during the procurement's planning phase.

Inventory costs: It is common that on-site inventory has a high loss percentage due to misplacement, theft, or other ways that inventory items can go missing. To maintain on-site inventory you must also manage agency resources and have warehouse space to stock the product. So it may be worthwhile for the agency to evaluate the benefits of having a supplier house the inventory. This type of arrangement can eliminate most of the missing inventory issues and resource and facility space requirements. Still, some agencies may prefer to participate in controlling the offsite inventory. In those cases, stipulations can be made to include inspections, cycle count, and audit controls as part of the contract. Additionally, the contract may specify consequences should the supplier not comply with the contract terms.

Internal resource costs: If a procurement is for a solution that requires a project team from the agency, consider the internal resource costs. The time agency personnel spend involved in project activities to identify and select products, review project deliverables and sign-off, and engage in change management are also TCO issues to consider.

Agency benefits: Another factor to consider is how a supplier may provide value to the public agency. Examples include benefits to revenue streams like local taxes, student enrollments, or visitors. Other benefits can include a supplier's charitable involvement, contributions, or volunteerism in the area. This can provide value to the agency by assisting and improving the local economy.

Performance: In some cases, a higher-priced item may have an overall TCO benefit if the item can perform more work in less time or using less fuel than the other available options.

Product standardization. Defining which product standards to use and driving purchases to those standardized and predefined products simplifies and streamlines the procurement process. The benefits include reducing unknown product spend and variation; time spent on procuring new items, product coding/classifications, and order processing; plus reducing parts inventory, maintenance training, and operator preparation, while also increasing product reliability when standardizing to a better quality brand. By standardizing products, an agency can more easily identify spend patterns, simplify spend analysis, and improve product demand forecasting. As with most organizational SOPs, we caution that standardization should not preclude introductions to new and innovative products, services, and solutions. It is possible to create standards that invite innovation through periodic "day in solutions" events throughout the year, which can generate a competitive atmosphere while at the same time affording a compliant operation guideline.

Quick Reference Guide #1: Evaluating True Costs and Benefits of TCO

In the NIGP Business Council white paper, "Total Cost of Ownership: Realizing Procurements Full Potential in Value Creation" we discuss considering all true costs when procuring a product or service, benefits realized from TCO, and the unintended consequences of using price as a primary factor in the decision making process. This chart summarizes the concept of the paper and can serve as a quick reference guide as you integrate TCO into your agency's procurement process.

TCO Variables

- Shipping, freight
- Fuel
- Insurance
- Financing
- Installation
- Inventory
- Maintenance (product, software)
- Training
- Testing
- Disposal
- Product lifespan
- Resources, staff time
- Subscriptions, licenses

Benefits

- Facilitate best value
- Gain visibility to all costs associated with a procurement
- Enhance effectiveness of procurement team
- Reduce administrative, operating, and maintenance costs
- Increase productivity, reduce workload
- End user satisfaction
- Mitigate risk
- Justify an intended acquisition
- Enhance supplier partnerships
- Increase agency revenue streams
- Visibility to supplier performance
- Ability to compare and contrast different variables of ownership
- Integrate sustainability practices

Unintended Consequences

- Greater cost to agency and taxpayers
- Increased risk to agency
- Additional labor costs
- Inefficient use of resources, rework
- Inferior product or service
- Supplier performance issues
- Poor service levels
- Exhausted budget
- Cancelled project / solicitation
- Need to re-solicit for product or service

Recommended TCO Practices

Below are a number of recommended practices that agencies may want to consider when integrating TCO into internal processes:

Actual Purchase Price: Find out the real price the agency is paying for products from a supplier. A supplier's offer of a large discount may be appealing, but it is critical the procurement team knows what their actual end price is. Often suppliers with no or low discounts are actually priced better than those with large discounts.

Consistent Shipping: For products that have previously been procured from specific suppliers, ask end users if they consistently receive all of the products they ordered or if shipments arrive incomplete, resulting in time spent waiting for backfilled items. To make a decision based on long-term benefits versus short-term savings, agencies can also look into whether certain items could be more efficiently purchased same day to ensure continued department performance even if the price may be slightly higher.

Contract Issues: Cooperative or existing contracts offer an opportunity to procure the correct solutions to achieve an agency's long-term goals rather than the lowest cost solution, which may be shortsighted. Additionally, contracts that provide the benchmarks or policies and procedures affiliated with the solution and procurement must be understood and followed by all parties.

Cooperative Purchasing Agreements: These agreements often use a variety of TCO areas to evaluate supplier proposals in response to RFP terms. Cooperative agreements can streamline procurement decisions, taking cost out of purchasing decisions. There are several common approaches to cooperative purchasing contracts, including Definite Quantity and Delivery, Indefinite Quantity and Delivery, and Piggyback/Cooperative purchasing contracts. In the definite quantity and delivery model there is a direct economic relation between risk and price; lower risk means lower price. Definite quantity solicitations and contracts identify all cooperative members and respective requirements and specify the delivery locations and schedule. In the indefinite quantity and delivery model agencies may achieve economies of scale and reduce administrative costs. The participating members are identified and requirements are estimated in the solicitation with no specific purchase commitment. Pricing is often a factor of the confidence of suppliers in the estimates. Contracts issued by individual governmental entities that allow other jurisdictions to use the contract (i.e., to "piggyback" on the contract terms and prices) are known as “piggyback” or cooperative purchasing contracts. The contracting jurisdiction must include piggyback language in the contract and the supplier must agree. Piggyback contracts represent the most immediate cooperative purchasing resource, especially for smaller communities. However, they can benefit all communities, including larger ones, by saving administrative costs and creating pressure for lower prices. Still, it is important to note that some entities do not have statutory authority to piggyback.

Please note that not all of these cooperative purchasing agreements are equal, and there are advantages and disadvantages to each of the models mentioned above. For example, while there may typically be no cost to the agency, there could be a financial cost to the supplier from dollar one that would then be absorbed into the pricing established in the agreement. So we recommend that agencies take the time to review the approaches carefully and follow the TCO process as outlined in this white paper.

Direct and Indirect Costs: For each purchase, procurement professionals should identify known direct and indirect costs and their applicable rate/cost to help them fairly and consistently evaluate competitors. The recommended practices include having full disclosure of all direct and indirect costs that are associated with the procurement, including the cost of operation. Among these costs are fuel, freight, shipping costs, and maintenance, which should be identified and stated by the procuring entity to ensure a fair TCO calculation, and the average cost of personnel or the labor rate of personnel in support of the potential application.

Product Quality: Evaluate the quality of a product purchased. Purchasing a slightly higher-priced item that lasts significantly longer than a lower-priced alternate could be a better choice over time. Product quality can also relate to references, so it is recommended that agencies review references in the TCO process.

Rebates: Find out if there is a rebate on the purchasing volume and any beneficial impact it would have and then apply the rebate or discounts to the life cycle of the product.

Supplier Support: Consider whether the supplier is a known entity, easy to purchase from, and able to reach out with support, training, product knowledge, and other types of activities to support the agency's needs.

Supplier TCO Methodology: Ask prospective suppliers to provide their specific methodology to address the TCO factors for a particular product and/or service. The agency could then compare the different responses to understand each supplier's specific TCO methodology. With this information in hand, the agency could specify that the TCO analysis would be used to determine the "winner" for "price."

Quick Reference #2: Quick Wins for Traction in TCO

In the NIGP Business Council white paper, "Total Cost of Ownership: Realizing Procurements Full Potential in Value Creation" we discuss how initially it can be challenging to incorporate TCO. There are several steps an agency can take to get started even while working on the longer-term, more complex aspects of TCO. This chart summarizes the concept of the paper and can serve as a quick reference guide as you consider integrating TCO practices within your agency.

Begin with Smaller and Less Complex Procurement Opportunities

- Develop an agency priority list
- Collaborate with all internal stakeholders
- Evaluate operational needs and purchasing history

Evaluate Purchasing History and Develop Baseline for Future TCO Analysis

- Review historical data to determine baseline for TCO evaluation
- Develop a specification that meets operational needs incorporating baseline and evaluation scorecard identifying quantifiable value
- Develop a tracking mechanism for lifecycle of product and TCO management

Leverage Supplier Relationships by Creating a Collaborative Approach

- Develop a supplier communication and contract management process plan
- Invite suppliers to develop a TCO plan that includes mitigation of risk to agency and innovative solutions in the pre RFP / RFQ phase
- Engage internal team for facts research in proposals utilizing quantifiable scorecard
- Supplier finalist determined and materials procured

Realizing Savings through Supplier Relationship Management

To get the most out of supplier relationships, an agency can develop a schedule of planned expenditures and educate all stakeholders on the importance of TCO and how it figures into total value as opposed to initial purchase cost. Effective supplier relationship management and information sharing allows suppliers to understand your current state of operations and that can lead to discussions about how to continue driving down costs through the proper product selection, training, equipment use, and maintenance.

As an agency establishes a TCO process, it will have the opportunity to identify and prioritize what is important to them by asking:

- What are our real needs?
- What industry trends should we consider in the procurement?
- What is the potential impact of our decision in the future?

Suppliers can supply some of this information. With effective contract management and supplier performance data, an agency will have easier access to the TCO information for a specific commodity or service, allowing the agency to compare it against new proposals. In an effective supplier relationship it is in the best interest of both parties to establish communication and trust to maintain a long-term partnership. A trusted supplier should provide competent and complete information so the agency can make the right decision. If during these conversations with suppliers an incumbent supplier offers options available in the industry that may exceed the current specifications, the agency can issue an RFI or RFP with alternate responses as an option. Procurement professionals can also get information by attending trade shows and industry days or talking to their existing supplier base prior to issuing an IFB. If the agency does not already have this type of supplier partnership in place, then using the solutions offered in NIGP's *The Healthy Agency-Supplier Relationship Guide* can provide a roadmap for developing this type of agency-supplier relationship.

From the supplier side, to be successful with the long-term sale cycle related to TCO, it is important that they assemble management and sales teams who are experts on their industry. Internal and external resources must be trained to understand the agency, its local procurement policies, and agency requirements. The supplier's management teams need to work with multiple resources at the local, regional, and corporate level to deploy the right combination of expertise, solutions, electronic business processes, and logistics capabilities to earn the business.

It is imperative that suppliers keep solutions simple and design them to overcome any difficulties in data analysis. In other words, for an agency to truly analyze a TCO solution submitted by a supplier, the supplier must ensure the solution has an integrated and easily accessible information system or communications team that the agency can connect with for the data that will allow them to make a TCO assessment.

As business writer Bridget McCrea pointed out in her 2013 article *"5 Reasons to Use Total Cost of Ownership,"* by using TCO to understand the overall costs associated with a product or service acquisition, the benefits go beyond cost reduction over time. TCO can strengthen supplier relationships, which are no longer strained by cost-cutting measures, so competitive advantage improves and suppliers gain visibility for their overall performance.

Value of Supplier Relationships – Real Life Examples

For government agencies, suppliers often align sales resources around the customer space and develop an individual business plan focused on an agency's budget, infrastructure, energy efficiency plans, IT and security infrastructure, and purchasing requirements. These suppliers are not focused on the short-term sale but on the agency's long-term requirements or goals. As an example, by sharing information with an agency about industry trends or updated building codes along with the continued convergence of the agencies' electrical, lighting, communication, and security systems, a supplier can enable more intelligent controls at lower costs. This is a complex sale that requires background in networking, power management, and lighting system design.

Similar to TCO for equipment, there is a definite TCO for the agencies looking at their facilities or campuses. A "smart" facility or campus is more than a trend; it is a sound investment in the future. At the heart of a "smart" or "intelligent" building is an infrastructure of lighting, communication, mechanical, HVAC, and security systems operating from a single IP-enabled network. Once connected, they can be monitored or controlled through one interoperable system that is easy to manage and maintain. Streamlining these traditionally disparate areas into a single, integrated system can translate into huge benefits for building owners in terms of profitability, productivity, and environmental impact. In addition, with issues such as carbon emission taxes, spiraling energy costs, operational efficiency demands, and water conservation weighing heavily on the minds of facility managers, many see intelligent building systems as a means to solve today's needs while preparing for tomorrow. Using the supplier's resources, along with their contacts and relationships in the consulting, construction, and manufacturing communities, building owners can assemble a team. This team can provide an assessment, design a strategy to reduce total building cost of ownership, boost building efficiency, and enhance productivity while meeting corporate sustainability measures and complying with governmental guidelines.

An example of a "smart" city system would be an overall public works infrastructure management system. This type of asset management technology is featured at trade conferences that highlight asset management and sustainability, as well as GIS platforms available today to help cities across all facets of procurement and supply, inventory, and asset management.

Integrating TCO into Evaluation Criteria

For each specific procurement involving a TCO analysis, the agency can discuss the important TCO components of the product, operation, and support with the end users and combine the information received from suppliers to construct a specific, agency-based TCO formula. After incorporating the TCO criteria for each product or service and developing the formula, the agency can quantify the benefits for using a TCO basis in its cost evaluation. To quantify or identify the hidden benefits of TCO in a purchasing decision, an agency may consider:

- Increase in product life cycle (greater hours and lower expense). This would indicate a reduced cost per hour of operation and less routine maintenance.
- Reduction in staff/workload devoted to maintenance and replacement
- Increase in productivity for each labor/hour
- Reduction in down time due to higher customer service and support
- Reduced repair costs due to easy access to service components
- Reduction in the time management of equipment issues with suppliers
- Reduced fuel usage resulting in reduced emissions.

The agency will need to ensure that their procurement code allows for a "best value" evaluation of the proposals since best value typically includes a calculation of TCO. Each supplier should be judged only on the common/agreed to criteria communicated to all.

By developing a simple scorecard to assess purchasing prices and practices, an agency can easily shed light on some TCO areas, especially if that information is already available within the agency. To avoid protests the evaluation criteria should be clear and not based on any potential future procurement relationship. By contracting with suppliers who have qualified references, and checking those references, agencies may be able to mitigate possible protests.

In 2015, a state released an ITB for vehicles and detailed the TCO/life cycle cost factors they were incorporating in the award criteria. Below is the language from that ITB's Scope of Solicitation and Award Criteria.

I. SCOPE OF SOLICITATION

ACQUIRE SUPPLIES / EQUIPMENT

The intent of this procurement is to establish statewide contracts for the purchase of vehicles as referenced above. The resulting contracts will be used by state agencies and political subdivisions per state and local requirements. Contracts will be awarded by item so offerors may bid on 1 or more items. Life cycle costing is used to determine vehicle awards unless the vehicle is ≥ 8,600 GVWR or classified as a law enforcement vehicle.

VI. AWARD CRITERIA

CALCULATING THE LOW BID

Life Cycle Costing

1. It is the intent of the state to award a contract to the vendor or vendors whose bid results in the lowest total cost during its period of ownership of the vehicles purchased. In determining the life cycle costs of a motor vehicle, the costs shall be determined on the basis of the unit price, resale value, and operating costs. The four (4) year residual value, 80,000 miles, and EPA ratings will be used to calculate the resale value and operating cost.

   SC Code 1-11-310 (A) requires the state to purchase motor vehicles on the basis of lowest anticipated total life cycle costs. EPA ratings are used to calculate resale value and operating costs. In the event that bids are received on different makes/models that meet specifications where one make/model has an EPA rating and the other make/model does not have an EPA rating (based on GVWR), only bids for those vehicles with available EPA ratings will be considered for award. Bids for vehicles without an EPA rating will be deemed non-responsive. In the event that all bids are for vehicles without EPA ratings (based on GVWR), non-rated vehicles will be considered and award will be made to the lowest responsive & responsible bidder. Life Cycle Costing will not be applied.

2. For the purpose of this procurement, the following contract award formula will be used.

   CA = UP + G -R

   CA = Contract Award
   UP = Unit Price + weighted "Total Adds" – weighted "Total Deducts"
   G = Projected Fuel Expenditure, adjusted to present value.
   R = Resale value (where applicable), adjusted to present value.

3. The above formula is predicated upon the use of the following definitions, criteria, and resources:

   a. All cost data will be adjusted to present value by utilizing discount factor of 5.1 percent per year.
   b. Fuel cost shall be based upon the current EPA Fuel Economy Guide, Est. Hwy. Mileage for the vehicle bid and the prices per gallon listed below. (This part of the LCC evaluation does not apply to Patrol Vehicles or vehicles with GVWR rating of 8,500 lb. or more).

   GASOLINE = $3.00

4. The resale value of the vehicles bid shall be the forty-eight month projected used car value as published in the current issue (prior to bid opening date) of the Black Book Official Residual Value Guide for New and Used Vehicles. (Does not apply to Patrol Vehicles and Medium through Heavy Duty trucks.)

Quick Wins in Incorporating TCO

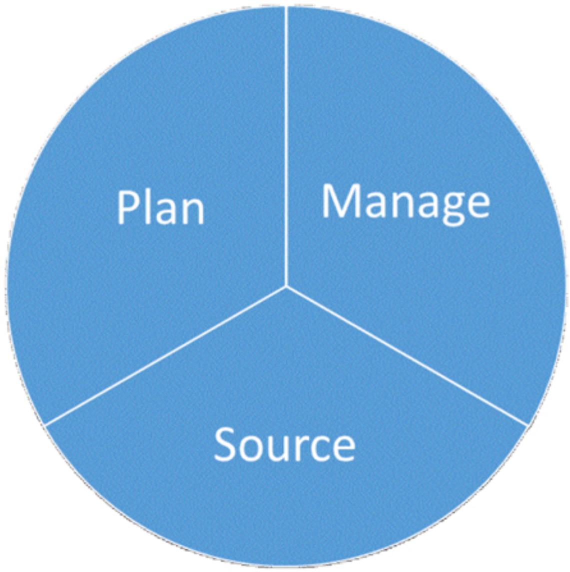
When moving to incorporate TCO in the procurement process, there are several steps an agency can take to get started even while working on the longer-term and more complex aspects of TCO:

- The procurement team will need to determine what its current cost of operation is to have a baseline for comparison purposes. In this baseline the team may want to include initial cost, ongoing service (parts and labor) costs, associated costs such as fuel consumption, downtime, inventory of parts costs, labor costs to complete the job, and value of equipment and disposition. Start by focusing on the TCO for product lines in which the data is easiest to attain data (e.g., printer ink toner) so that simple comparisons can be made, and then use as a format for increasingly more complicated product lines.
- Use internal information the agency already has to evaluate any tangential benefits the agency gets from working with specific suppliers. Look into the purchasing history from the perspective of relationships, pricing, delivery, product availability, and local economic impact.
- Approach TCO as "risk mitigation." By mitigating risk, an agency can avoid a public and costly project failure that was awarded to a supplier whose bid price was too low to complete the stated requirements.
- Consider TCO as an agency benefit tool outside of the cost of specific purchases. Does a supplier provide an additional advantage to the agency/area/municipality that another supplier cannot?
- Look for opportunities to design the implementation plans to be phased in to create quick wins with quantifiable value. Agencies can specifically call for and allow flexibility in supplier proposals to suggest quick win approaches.
- Focus on developing effective contract and/or supplier management. Through open lines of communication, the agency can reach out to suppliers to access TCO information for specific commodities or services and to uncover new or alternative options in the industry that may provide better value.

Quick Reference #3: Integrating TCO into Procurement

In the NIGP Business Council white paper, "Total Cost of Ownership: Realizing Procurements Full Potential in Value Creation" we discuss ideas on how agencies can integrate TCO practices into the procurement process. This chart summarizes the concept of the paper and can serve as a quick reference guide as you consider identifying and implementing ways to achieve best value within your agency.

- Engage Stakeholders Across Key Departments Including End Users
- Identify and Prioritize Needs
- Perform Market and Spend Analysis
- Solicit Information from Suppliers
- Meet with Potential Offerors
- Define and Quantify Value and Benefits
- Determine Current Cost of Operations
- Identify TCO Variables
- Create TCO Value Formula



- Measure Spend
- Assess Cost Savings
- Evaluate Operational Efficiencies
- Create Supplier Performance Scorecard
- Monitor Supplier Performance
- Hold Regular Supplier Review Meetings
- Gauge End User Satisfaction
- Discuss Trends, Needs, Cost Savings Opportunities, New Solutions, New Technologies with Supplier

- Incorporate TCO Variables Into Requirements or Evaluation Criteria
- Identify Qualified Suppliers
- Review References to Verify Supplier Capabilities
- Select Suppliers Based on Specified Requirements and Evaluation Criteria
- Set Supplier Performance Metrics and Expectations

TCO in Practice – Real Life Examples

For eProcurement technology an agency needs to consider the total cost to acquire the software, whether it be SAS or hosted, and the cost to manage the entire "procure to pay" process. Various pricing methods may focus on only large contracts or suppliers with multiple product items, when the real focus based on the vast array of purchases by government should be the "one-off" type contracts that are primarily supported by small businesses. The level of effort and the suppliers' costs for conducting business electronically through technology solutions should be an included cost in the TCO calculation.

For a capital equipment procurement, the agency may need to consider total quality, life span, hard and soft cost savings, ease of installation, and other measurable benefits of the equipment or solution. Other factors to consider are the benefits to the agency revenue stream, employees, visitors, or students from upgrading to a well lit, more sustainable, and technologically friendly environment. Also the cost of implementing the wrong solution or waiting to upgrade, or the eventual costs to re-implement or repurchase items because the cheaper solution failed or didn't perform to specifications, are additional factors. Agencies may want to consider the impact from lost revenues and on employees or students related to not purchasing the right solution. An educational facility that doesn't provide a communication backbone to allow students or professors to use today's technology may lose enrollment dollars. The same losses could apply to an agency losing employees or productivity due to poor technology and equipment.

In a procurement to furnish and install athletic field lighting at a recreational complex, a city's purchasing division staff used TCO as the basis of the award to select the responsive and responsible supplier with the lowest TCO. In the city's ITB, the Basis of Award section stated, "Award will be made to a responsive and responsible bidder submitting a system where 1) the purchase cost of a complete system does not exceed the City's budget and 2) the Total Cost of Ownership is the lowest when compared to all other qualifying submittals." The TCO was based on the purchase cost plus 25-year operating lift cycle cost. When the winning supplier submitted a response providing the lowest TCO over a 25-year period for all fields, the city elected to award that supplier the base bid, options for two additional fields, and a remote monitoring and control feature.

An agency with a recent construction project began by taking a close look at alternatives to conventional construction (see chart below). On the surface the primary alternative—modular construction—appeared to be slightly more expensive. But by using TCO principles, the agency was able to determine that in the long run the modular alternative provide better value. Even though the modular construction would cost more initially, it would immediately save 95 pounds of waste that the agency would not need to dispose of. Further, should the agency need to move the walls in the future, the modular option would save more than $9500 and keep 979 pounds of waste out of landfills. By choosing the alternative option, the agency saved money and met their environmental sustainability goals over the long run.

CONVENTIONAL			**MODULAR**			**DIFFERENCE**
Initial			**Initial**			
Time	64.41	man hrs	Time	21.21	Man hrs	**(43.20)**
Cost	$7,478		Cost	$7,575		**96.54**
Waste	110.82	lbs	Waste	15	lbs	**(95.82)**
Move			**Move**			
Time	176.63	man hrs	Time	22.50	man hrs	**(154.13)**
Cost	$12,104		Cost	$2,463		**(9,641.11)**
Waste	886.56	lbs	Waste	3	lbs	**(883.56)**
Totals			**Totals**			
Time	241.03	man hrs	Time	43.71	man hrs	**(197.33)**
Cost	$19,582		Cost	$10,038		**(9,544.57)**
Waste	997.38	lbs	Waste	18	lbs	**(997.38)**

A school system reduced the cost of floor wax by changing to a product priced 15% higher than the current product. However, the new wax was 25% solid while the current product was 18% solid. The new product’s 33% increase in solidity meant staff only needed to apply four coats of wax instead of the six coats they had been applying. The school system also saw additional cost savings from the reduced labor time.

Challenges of Incorporating TCO in Procurements

Initially it can be challenging for procurement officials to incorporate TCO into their practices. In some instances it may be difficult to make a case for paying more upfront for greater savings over the long term when funding is limited or user departments may be uncomfortable if suppliers they are not familiar with win bids using TCO.

It may also be difficult for their agencies to gather and allocate all data associated with the various products they purchase, for example, or to conduct inventory management, particularly when products have been produced specifically to an agency's specification. In other cases:

- Suppliers might not have documented data to support their product or equipment maintenance or repair records to properly calculate TCO.
- The estimated salvage revenue may be difficult to calculate without prior experience and data to support the estimated cost recovery revenue.
- The cost for staff involved in product support or service may be difficult to "right-size" for each supplier.
- The agency may not have direct experience in providing a reasonable estimate on the potential life expectancy of the product or service.
- Suppliers may be more likely to protest evaluations based on TCO because they are able to refute additional factors involved in the evaluation.
- State law or current procurement policies may not enable TCO implementation.

These issues may cause some procurement officials to steer away from using a TCO approach. While we acknowledge that these challenges are not insignificant, if an agency is able to put the recommended practices into place, many of these challenges will be mitigated for both suppliers and procurement officers.

Unintended Consequences of Selecting the Lowest Price

Despite the challenges in incorporating TCO into procurements, awards based solely on lowest price are not without risk and may not guarantee the lowest price. Below are a few case studies of the unintended consequences that arose when an award was based solely on the lowest price:

- Five years ago, a city government put out a bid for three lawnmowers. The superintendent preferred one product and recommended that the city purchase it. The city eventually purchased a cheaper product from a different supplier and forced the superintendent to accept it. It soon became clear that the cheaper product would not perform to the superintendent's satisfaction despite the best efforts of the distributor and factory representatives to remedy the situation. When the distributor and manufacturer said the supervisor was just too picky, the supervisor returned to using the old mowers. The superintendent kept the cheaper products for the year and then tried to get the distributor to take them back due to the performance issues. Eventually the city and the distributor reached a settlement—the city paid $60K to the distributor to remove the poor performing product and disqualified them from any bids for two years.

- A state used lowest price to determine the winner in an office supplies contract. Clearly, the proposed cost was significantly lower than any of the other proposals, which should have caused the buyer and evaluation team to question whether or not the supplier could actually provide the pricing with the promised service levels. It was a classic "too good to be true" price. After less than one year, the state had to leverage a cooperative contract for office supplies when the RFP winner could not meet the contract terms. In this case, the state procurement code had required them to award the contract based on lowest price and that resulted in an award to a supplier that could not meet the stated requirements.

- A state agency did not provide a specific scope of work for an IT services project. The winning supplier, therefore, did not include critical and needed services to complete the project successfully. As a result, the project was cancelled after the budget was exhausted, even though it was not complete. In this case, the state agency did not understand the "fine print" when evaluating the winning supplier's proposal and thought they were procuring a complete scope of services but in fact did not.

- A few years ago a county included specialty line items unrelated to the standard category of products that they were purchasing. Their contract had no flexibility for non-standard product needs. A supplier won the quote with the low bid on the standard category of products. But when the county was unable to acquire specialty line items from the low bid supplier in a time of urgent need, they reached out to another supplier and learned very quickly the price disparity of the specialty items. The county later learned the low bid winner had charged more than 150% on the unrelated specialty items.

- When a city learned that the federal government established a deadline requiring no-lead meters, they decided to try to beat the deadline by ordering their current meters and having them installed before the deadline. Though they purchased a large volume/dollar (low bid) of meters that did not meet the new no-lead specification, the city felt it was compliant at the time. Another supplier offered them a co-op addendum alternative that would help them save costs from current market prices and meet the future federally regulated specifications. However, since this alternative was still more costly than the low bid, the city decided it was in their best interest to go with the low bidder. The city soon came to regret this decision when the non-installed meters they held in stock at the federal deadline were deemed non-returnable.

- An agency signed a contract with a supplier who offered them a 20% discount on everything they purchased without evaluating what they were actually paying or considering whether the supplier provided a benefit to the local community (since most agencies are funded with local tax dollars). This “we’ve always done it this way” procurement decision resulted in the agency paying more for an item from the incumbent contract holder than if they had explored alternatives from suppliers who offer a lower or no discount. For example:
  - Business A offers a 20% discount on Product XYZ that they list for $100: transaction price is $80
  - Business B offers a 10% discount on Product XYZ that they list for $85: transaction price is $76.50

- Business C offers no discount on Product XYZ that they list for $75: transaction price is $75.00

Businesses B and C have a local presence in the state and county where the agency resides while Business A ships from other states.

TCO and the Regulatory Environment

Many agencies today already operate under legislation that enables them to use TCO in their procurement process and evaluation criteria. However, since the regulatory environment varies by state and, in some cases, by agency, some agencies are still restricted in their use of TCO. In some cases, agencies are not able to use TCO because the governing legislation does not expressly permit the agencies to use it. As a result, they spend the initial lowest possible dollar amount on products or services that meet the specifications within each budget year. Some states, for example, have laws that maintain that bids must be awarded to the lowest bidder. If procurement professionals were to include labor cost savings or local tax base analysis in their bid analysis, they may encounter a problem if their agency cannot actually document a planned reduction in staff to realize those savings. If the state statutes do not address this, courts could rule that those savings may not be applied in determining the low bid.

In situations like these where an agency is not able to use TCO, practitioners may want to consider addressing the procurement regulations. As an example, in 2001 Texas changed its laws to allow TCO to be an evaluation factor in awards. The law was established to create authority and provide flexibility for political subdivisions to use alternative procurement methods to address their procurement needs. It authorized a municipality to award certain contracts under the competitive sealed bidding process to the bidder who provides goods and services at the best value for the municipality, rather than only to the lowest responsible bidder. The law also set forth the criteria a municipality may consider in determining best value.

Below is the pertinent excerpt from Texas Local Government Code, Chapter 252:

Sec. 252.043. AWARD OF CONTRACT. (a) If the competitive sealed bidding requirement applies to the contract for goods or services, the contract must be awarded to the lowest responsible bidder or to the bidder who provides goods or services at the best value for the municipality.

(b) In determining the best value for the municipality, the municipality may consider:

(1) the purchase price;

(2) the reputation of the bidder and of the bidder's goods or services;

(3) the quality of the bidder's goods or services;

(4) the extent to which the goods or services meet the municipality's needs;

(5) the bidder's past relationship with the municipality;

(6) the impact on the ability of the municipality to comply with laws and rules relating to contracting with historically underutilized businesses and nonprofit organizations employing persons with disabilities;

(7) the total long-term cost to the municipality to acquire the bidder's goods or services; and

(8) any relevant criteria specifically listed in the request for bids or proposals.

(b-1) In addition to the considerations provided by Subsection (b), a joint board described by Section 22.074(d), Transportation Code, that awards contracts in the manner provided by this chapter may consider, in determining the best value for the board, the impact on the ability of the board to comply with laws, rules, and programs relating to contracting with small businesses, as defined by 13 C.F.R. Section 121.201.

In many places there is no need to change the laws to incorporate TCO as most agencies already have enabling legislation that allows purchases using bid *and* RFP methods. In one city with this type of legislation, agencies use both methods. If they are using a bid process where price is the only factor, they list life cycle costing items on the bid schedule. These items may include

- Initial price
- Expected standard maintenance

- Fuel cost
- Expected market value in five years

If the city is using an RFP process to make the TCO determination easier, they can ask suppliers for the same information and evaluate the life cycle costing to determine the TCO. In this case, TCO would be one of the criteria being scored.

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Rick L. Grimm, CPPO, CPPB
Chief Executive Officer

Fellow NIGP Members and Public Procurement Practitioners,

Almost all common business transactions involve a buyer and a seller. As Public Procurement Professionals, we are most comfortable in the role of buyer and concentrate on the procurement process itself. However, it is sometimes useful and instructive to gain knowledge from the other point of view, that of the seller. The NIGP Business Council provides great benefit to the members of NIGP by providing that other viewpoint in addition to providing objective observations of government business processes and practices.

Last year, the NIGP Business Council published a whitepaper entitled "The Healthy Agency-Supplier Relationship Guide". This whitepaper, along with the many panel discussions presented at NIGP Forum and NIGP Chapter events, served to stimulate dialog and educate agency members on the proper perspective of forging partnerships with suppliers while remaining true to the primary public procurement value of impartiality.

This year's whitepaper, "Total Cost of Ownership", is a natural progression of further exploration of the agency-supplier relationship. While remaining true to our value of impartiality, we must rely heavily on the supplier to provide product and industry expertise. It is that very expertise which allows us to develop a valid process that addresses costs beyond initial acquisition.

By no means considered a new concept, Total Cost of Ownership (TCO) continues to be an important one. With the rapid advancement and integration of technology in practically all equipment lines, relative weight of cost factors of ownership may drastically change from previous acquisitions. Careful consideration must be applied given those changes. Automotive engine life has drastically increased in recent decades. Fuel efficiency and fuel costs, while remaining highly variable, continue to be of prime consideration. Laser printers are practically given away when compared to the lifetime cost of the consumable toner cartridges. In reality, applications of TCO are plentiful and therefore, as public procurement professionals, we should periodically pause to consider its importance. In light of the importance of TCO, I would highly recommend that you read this whitepaper and let it spark new ideas; changes in practices and processes; and foster discussion with suppliers and peers alike.

I would like to express my extreme gratitude to Paul Murphy, Cynde Beedle Smith, and all NIGP Business Council Members for their contributions to this paper. In addition, my deepest appreciation goes to Belinda Sites, NIGP Director of Member Relations, for keeping this project on track.

Enjoy!

Sincerely,

Jack Adger

Jack Adger, CPPO, CPPB
Chair-Elect, NIGP Governing Board
NIGP Business Council Liaison

Conclusion

The Business Council's objective for creating the *Total Cost of Ownership* white paper is to increase awareness and educate procurement professionals about TCO, drive change in some current government procurement practices, find ways to help agencies introduce TCO concepts into their procurement processes, and move toward long-term sustainable cost savings strategies instead of short-term benefits and lowest price supplier selection.

We appreciate the conversations with and suggestions from our public procurement partners, many of which are included in this paper. By integrating into your procurement process the ideas and recommended practices outlined in this paper, you should be able to uncover hidden costs and critical cost savings, better reduce and control costs, develop a complete and clear picture of investments, establish strategic relationships with suppliers, minimize risk, and drive organizational change.

For more information

If you have any questions about the Business Council, please contact Belinda Sites at bsites@nigp.org.

Additional Resources

The Resource Center at www.nigp.org has a range of tools developed to support your day-to-day activities and help you effectively manage your procurement organization. At the Resource Center you'll find NIGP's Online Dictionary of Procurement Terms; a library with thousands of solicitations and templates, publications, and research to assist you with your solicitation development activities; sourcing tools to help you with day-to-day supplier research and due diligence; and management tools, guidance about best practices, and publications focused exclusively on topics relevant to public procurement.

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