

Selection of the Inspection Team

Who Should Inspect the Inventory?

Apart from the obvious; experience and expertise, there are other factors which weigh heavily on the selection process. The following are some of the questions that should be considered.

How will the data be collected? It is advantageous that a software based application be used for data collection. This can be as unsophisticated as a simple spreadsheet or a fully functional solution.

- eliminates duplication of effort as data entry will not have to be carried out as a separate task.
- can be designed to prevent erroneous entries or incomplete data input.
- cross checking routines can help ensure consistency.
- isolating selection from a detailed menu system also enhances both accuracy and consistency of data input.
- data can be easily transferred to a main server for review by senior staff, often wirelessly, from the site.
- Cost calculations can be made on "the fly" to assist the inspector in the rehabilitation selection process thereby providing more suitable strategies

How will the collected data be presented? With large inventories, simple submission of a stack of paper reports is not adequate. The data contained in those reports must be disseminated and analyzed. At the very least the management team will have to extract rehabilitative cost estimates, age statistics and original design details so that they can start the process of assembling performance models.

Will the data provided integrate with existing management systems? If the agency already has a system in place, or is at least contemplating adopting a system in the future, will the data provided integrate with that system. This means the data must not only export with relative ease but must also populate the management system sufficiently for it to operate. Anyone carrying out inspections should be comfortable with this restriction and familiar with the management system in question.

Who Should Not Inspect the Inventory?

As important as it is to make a correct choice with regard to those entrusted with inspecting a bridge inventory, the same scrutiny must also be applied to the corollary; who should not inspect the inventory.

Firms Deriving Work from an Inspection Report

Under no circumstances should those responsible for inspection have the opportunity to profit from recommendations they put forward. Too often consulting firms are put in the position of recommending work in an inspection report that they themselves provide. This poses an obvious conflict of interest that undermines the credibility of the entire inspection process, not to mention the consulting profession itself. This is not to say that multi-disciplinary firms need be excluded from the inspection process, however, if they chose to participate, they must not be eligible to bid on any further work associated with a structure their firm has inspected. This stipulation must be made clear in the bid documents.

It may be argued that these firms will still have to bid competitively for the follow up work, however, when entrusted with the inspection of an inventory, a company has a distinct advantage over its competitors who must commit significant resources gaining similar familiarity with each structure in the contract prior to placing their bid. This may lead to claims against the municipality for *unfair bidding practices*. Other bidders may also require information from the inspection company which leads to the obvious conflict of contacting their competitor for information during bid preparation. Furthermore, public perception may be that by awarding inspection contracts to multi-disciplinary firms, they are being positioned to saturate the market with a need for services they provide.

Firms with Design Conflicts

If a firm, or a company it has acquired or associated itself with, has had any prior involvement in the design, construction or rehabilitation of a particular structure they must not be involved in its inspection except possibly in an advisory capacity should questions arise as to material properties, weather conditions during construction, design details etc.

Quite often, during the course of an inspection, original design details come under scrutiny. In a few instances, the commentary may reflect negatively on the original design or its construction. This is necessary, if it is accurate, since the agency responsible for the structure needs to know where errors have occurred in the past to help them prevent the same errors from occurring again in the future. Clearly this places the designer or builder in a disadvantageous position with regard to credibility and, as always, impartial and unbiased third party review is the best policy.

In-House Personnel

Occasionally an agency will attempt to undertake the task of inspecting its own bridge inventory. This is sometimes considered in small municipalities in an attempt to save money or to keep idle staff busy. In other cases, an agency simply wants to be more involved in the management process and mistakenly feels that the path to that involvement is to carry out their own inspections. Whatever the reason, in-house inspection is nearly always ill-advised.

It is rarely the case that a municipality will have the expertise or efficiencies in place to inspect their own bridge inventories. It will almost certainly cost many times more than engaging the services of private firms specializing in the field. If the goal is a more "hands on" understanding of the needs of the inventory then actual inspection will consume a disproportionate amount of valuable time that can be far more productively spent analyzing the information at hand and modifying recommendations and forecasts to suit the agency's specific needs.

Some other less obvious concerns with in-house inspection are as follows:

Succession - For succession purposes clear procedures must be followed and a concise, repeatable process applied that will allow future inspectors and managers to continue the asset management process. If the entire management process is handled in-house by a single individual, the agency must ask itself what happens when, for whatever reason, that individual departs. At the very least it is important that whatever decisions are made are well documented and that at least two other staff members are involved throughout. A sound management system will automatically generate full documentation and provision for declarations wherever critical decisions are made. It will also survive its creator if properly designed and if escrow clauses are in effect in the licencing agreement.

Third Party Review - Denying a third party review of procedures and practices is not in the best interest of any municipality. Third party review is not only critical to an unbiased assessment, it also provides an additional viewpoint that brings fresh ideas and approaches as to how deficiencies can be most effectively dealt with. Apart from a marginal comparative cost, there is simply no disadvantage to such a review.

Liability - The most important goal of a bridge management system is to ensure safe passage of the public across all structures in the agency's jurisdiction. While obviously a secondary consideration, it is also in the public interest (particularly those of its taxpayers) that the agency controls its liabilities should an issue arise. While it is true, the ultimate responsibility lies with the municipality itself, without the litigious insulation that a third party provides the agency exposes itself to an unacceptable and entirely unnecessary level of risk.

Conflict of Interest - In most jurisdictions the owner of a property is not eligible to inspect and approve their own home or their own vehicle for certification or insurance purposes. To do so would represent a clear conflict of interest and would eventually lead to circumvention of building codes and vehicles that are not roadworthy traveling our highways.

By inspecting its own assets and dismissing third party review an agency leaves itself open to criticism regarding a lack of transparency. It is even conceivable that inspection reports could be misrepresented to mask the consequences of poor decisions the agency has made in the past. The fact that a municipality would not consider such a thing is irrelevant. It is the public perception that it has positioned itself in such a way for no clear reason that contributes to a breakdown in public trust.