



OFFICE OF THE INSPECTOR GENERAL COMMONWEALTH OF MASSACHUSETTS

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Construction Management at Risk Under M.G.L. c. 149A

Frequently Asked Questions

What is the construction management at risk (CM at risk) method required by M.G.L. c. 149A and how does it differ from the design-bid-build method required by M.G.L. c. 149 for procuring a construction project?

Construction projects typically involve three distinct stages: planning, design, and construction. Under M.G.L. c. 149, which requires a delivery method known as design-bid-build, these stages are sequential: The owner conducts a competitive bidding process based on a complete design and awards the construction contract to the lowest responsible and eligible bidder. The general contractor begins its involvement only at the construction stage.

The CM at risk delivery method differs from the design-bid-build delivery method, which is why CM at risk is called an alternative project delivery method. Under M.G.L. c. 149A, which contains the required procedures for using CM at risk, the owner selects the CM at risk firm at the outset of or during the design stage using a competitive selection process that focuses on qualifications and fees. The CM at risk firm provides preconstruction services to the owner during the design stage and becomes the general contractor during the construction stage. The CM at risk firm, the owner's project manager (OPM) and the designer work together throughout the planning, design and construction stages of a project.

May public jurisdictions in Massachusetts use CM at risk instead of design-bid-build for construction projects?

Yes, subject to certain restrictions. Public jurisdictions may use the CM at risk process in M.G.L. c. 149A, §§ 1-13, only for building projects estimated to cost \$5 million or more. CM at risk is not available for building projects with lower estimated costs or for public works (non-building) projects.

Does my jurisdiction need to obtain permission to use CM at risk?

Under M.G.L. c. 149A, § 4(d), most public jurisdictions must apply to and obtain advance approval from the Massachusetts Office of the Inspector General (OIG) before using CM at risk to procure any specific building project estimated to cost \$5 million or more. You can find more information on the application process at www.mass.gov/how-to/apply-to-use-cm-at-risk. The following agencies are exempt from the application requirement for each CM at risk project but are required to submit their CM at risk procedures to the OIG for review and approval every year: the Division of Capital Asset Management and Maintenance, the Massachusetts Port Authority, the Massachusetts Bay Transportation Authority, the Massachusetts Water Resources Authority, the Massachusetts State College Building Authority, and the University of Massachusetts Building Authority.

What if the OIG does not approve my jurisdiction's application to use CM at risk or my jurisdiction's CM at risk procedures?

Your jurisdiction may submit a corrected application or corrected procedures to the OIG for reconsideration. Otherwise, you may procure the building project by following the design-bid-build procurement process required by M.G.L. c. 149, §§ 44A-44J.

Does the CM at risk firm bid on the construction project?

No. The CM at risk firm is selected before the project design is completed and ready to put out to bid. At this point, the CM at risk contract contains only the CM at risk firm's fees for preconstruction and construction services. At some point after the schematic design is completed, the owner and the CM at risk firm will negotiate a guaranteed maximum price (GMP) amendment to the existing CM at risk contract. The GMP is the agreed-upon maximum dollar amount to be paid to the CM at risk firm for the actual cost of the construction work, the general conditions, and the CM at risk firm's fees for preconstruction and construction services. It is important to understand that the GMP is based on what is known about the project at the point in time when the GMP is negotiated. Under M.G.L. c. 149A, the GMP amendment to the CM at risk contract must include a list of all drawings, specifications and other information (including a list of assumptions and clarifications) on which the GMP is based.

Is the GMP guaranteed even if there are changes to the project after the GMP is established?

No. The term "guaranteed price" can be confusing. Project costs and therefore the amount paid to the CM at risk firm can change. As explained above, the initial GMP is based on the drawings, specifications, and other information and assumptions in the GMP amendment. When any of these items change, the GMP can and often does change as well. For example, if the project scope or requirements change from those on which the GMP was based or if unforeseen site conditions are encountered during construction after the GMP amendment was executed, the public jurisdiction will be required to approve a change order, and the dollar value of the change order will be added or subtracted from the previously established GMP.

What are some examples of the preconstruction services that a CM at risk firm typically provides during the project's design stage?

Depending upon the scope of services specified by the public jurisdiction in the contract for CM at risk services, a CM at risk firm typically advises the public jurisdiction about issues such as project siting, the project budget, the project schedule, value engineering, constructability and the quality of the

design documents submitted by the project designer. The CM at risk contract may also require the CM at risk firm to develop one or more project cost estimates. A legislatively mandated 2009 report issued by the OIG about the experience of Massachusetts public agencies with CM at risk found that public owners regarded the preconstruction services provided by the CM at risk firm as a major benefit of CM at risk. The report is available at www.mass.gov/info-details/learn-about-cm-at-risk#report-to-the-legislature.

Is an owner's project manager (OPM) required by M.G.L. c. 149A for CM at risk projects?

Yes. Public jurisdictions using CM at risk must contract with or assign a qualified OPM to a CM at risk project, just as on M.G.L. c. 149 projects estimated to cost \$1.5 million or more.

Why is an OPM required on a CM at risk project, given that the CM at risk firm provides construction management services?

Although their titles sound similar, the differing roles of the CM at risk firm and the OPM are important to understand. M.G.L. c. 149, § 44A½, requires the OPM to serve as the owner's agent during the planning, design and construction stages of the building project. This means that the OPM is legally required to represent the interests of the owner on the project. Accordingly, the OPM must be independent of the other project participants, including the designer and the contractor. By contrast, the CM at risk firm and the owner have competing contractual interests despite the CM at risk process allowing for greater cooperation among the parties. This greater cooperation does not mean that the CM at risk firm is obligated to consider the owner's interests if those interests conflict with the interests of the CM at risk firm. As a result, monitoring the CM at risk firm's performance is thus essential, and the OPM fulfills this responsibility on the owner's behalf.

How are the subcontracts on a CM at risk project procured?

Under M.G.L. c. 149A, all subcontracts estimated to cost more than \$25,000 require competitive bidding. Subcontracts in the 18 filed sub-bid categories identified in M.G.L. c. 149 are called "trade contracts" and must be procured using a formal prequalification process followed by a competitive bid process that resembles the M.G.L. c. 149 bid process. Other subcontracts are awarded through a less formal prequalification and bidding process managed by the CM at risk firm.

What are some of the risks of using CM at risk instead of design-bid-build on a public building project?

Unlike design-bid-build, CM at risk requires the public jurisdiction to undertake extensive reviews and ongoing monitoring of the project costs. The public jurisdiction is also responsible for negotiating a GMP with the CM at risk firm. Without the necessary specialized expertise to assist with these tasks, public jurisdictions may incur unnecessary or inflated project costs. Several other disadvantages of CM at risk cited by public owners include the lack of a firm construction price until later in the project on a CM at risk project, the lack of risk borne by the CM at risk firm when the GMP is negotiated late in the project, and the difficulty of countering public misconceptions that the GMP or "guaranteed price" cannot increase project cost to the owner.

What are some of the benefits of using CM at risk instead of design-bid-build on a public building project?

Unlike design-bid-build, CM at risk allows the public jurisdiction to select the CM at risk firm, which also serves as the general contractor for the project, based primarily on qualifications. The CM at risk firm can bring valuable expertise to the project during the planning and design stages, and the collaboration between the CM at risk firm and the project designer during these stages can result in fewer disputes and change orders during construction than on a design-bid-build project. The early involvement of the CM at risk firm also allows the project to be fast-tracked and long lead-time items (materials or specialty items) to be ordered earlier than would be possible on a design-bid-build project. The cost transparency of the cost-plus CM at risk contract can also be beneficial, in contrast to the fixed-price construction contract procured using the design-bid-build method. A public jurisdiction will be more likely to capture these potential benefits and minimize the potential risks cited above by investing sufficient resources in project oversight by in-house staff and a knowledgeable, experienced OPM.

How should I decide whether to use CM at risk on a building project?

CM at risk is not appropriate for every public jurisdiction or for every building project. In choosing between CM at risk and design-bid build, you should consider several factors. For example, is your jurisdiction willing and able to assign qualified staff or contract for the necessary expertise to provide the more extensive project oversight, including financial oversight, required by CM at risk in comparison with design-bid build? Does the project entail complex logistical challenges that could be met by fast-tracking and other phasing methods? Will your jurisdiction's stakeholders support a project that will not have a firm construction price until late in the project? The choice of CM at risk will hinge on the characteristics of both the project and of the public jurisdiction that will be responsible for the project.

Where can I learn more about using the CM at risk method?

The OIG's manual, *Designing and Constructing Public Facilities*, which you can access at www.mass.gov/doc/designing-and-constructing-public-facilities-0/download, provides detailed guidance on using CM at risk under M.G.L. c. 149A. The OIG's MCPPO program offers the following classes on a periodic basis: "CM at Risk Under M.G.L. c. 149A: Legal Requirements and Practical Issues" and "Making a Choice: Design-Bid-Build or Construction Management at Risk." You can find additional information on using CM at risk at the websites of the Office of the Attorney General, the Division of Capital Asset Management and Maintenance and the Massachusetts School Building Authority.