

Legal Research Digest 43

CONTRACTUAL MEANS OF ACHIEVING HIGH-LEVEL PERFORMANCE IN TRANSIT CONTRACTS

This report was prepared under TCRP Project J-5, "Legal Aspects of Transit and Intermodal Transportation Programs," for which the Transportation Research Board is the agency coordinating the research. The report was prepared by Larry W. Thomas, The Thomas Law Firm, Washington, DC. James B. McDaniel, TRB Counsel for Legal Research Projects, was the principal investigator and content editor.

The Problem and Its Solution

The nation's 6,000 plus transit agencies need to have access to a program that can provide authoritatively researched, specific, limited-scope studies of legal issues and problems having national significance and application to their business. Some transit programs involve legal problems and issues that are not shared with other modes; as, for example, compliance with transit-equipment and operations guidelines, FTA financing initiatives, private-sector programs, and labor or environmental standards relating to transit operations. Also, much of the information that is needed by transit attorneys to address legal concerns is scattered and fragmented. Consequently, it would be helpful to the transit lawyer to have well-resourced and well-documented reports on specific legal topics available to the transit legal community.

The *Legal Research Digests* (LRDs) are developed to assist transit attorneys in dealing with the myriad of initiatives and problems associated with transit start-up and operations, as well as with day-to-day legal work. The LRDs address such issues as eminent domain, civil rights, constitutional rights, contracting, environmental concerns, labor, procurement, risk management, security, tort liability, and zoning. The transit legal research, when conducted through the TRB's legal studies process, either collects primary data that generally are not available elsewhere or performs analysis of existing literature.

Applications

Financial pressures within the transit industry require that contract performance be on time and within the allocated budget. There are a variety of contractual means

that transit agencies have used with varying degrees of success to achieve on-time contract performance. All types of contracts can involve payment for performance, including construction, service, materials, supplies, and rolling stock, as well as payment for maintenance and repair. Contracts can also include incentive payments for on-time or early contract performance.

Essential to an effective contract are well-defined performance standards. Standards must include all important criteria and definitive and objective means for monitoring performance. Of equal importance is a schedule for performance with consequences for failure to meet that schedule. These contracts often include liquidated damages and sometimes include provisions authorizing incentive payments for early or enhanced performance.

A nationwide survey of transit agencies of all sizes was undertaken for this project to obtain information regarding transit agencies' success or failure in using performance-based provisions in their contracts; to identify any legal or other restrictions on their use of incentives or liquidated damages in their contracts; to obtain information on how the agencies determine the amounts of incentives and liquidated damages to specify in their contracts; to ascertain whether there are any risks or adverse consequences associated with the use of such clauses, such as litigation, claims, delays, limiting of competition, problems in enforcement, or increased costs; to evaluate the contractual provisions that have been successful; and to identify practices that respondents believed to be effective to achieve early or on-time performance. The responses to this survey are discussed throughout this digest.

This digest should be useful to attorneys, transit administrators, contracting officers, engineers, construction contractors, and transportation planners.

CONTENTS

| | |
|--|----|
| I. Introduction, | 3 |
| II. The Use of Incentive and Liquidated-Damages Clauses in Contracts with FTA Funding, | 4 |
| A. Introduction, | 4 |
| B. FTA New Starts Program, | 4 |
| C. Funding of Capital Projects, | 4 |
| D. Use of Value Engineering, | 4 |
| E. Value Engineering Clauses, | 6 |
| III. Authority for the Use of Incentives and Liquidated-Damages Clauses in Transit Agency Contracts, | 7 |
| A. Statutory and Regulatory Authority, | 7 |
| B. Bonding and Insurance Limitations, | 8 |
| C. Suitability of Grantees, Contractors, and Contracts for High-Performance Contracts, | 8 |
| IV. The Use of Standards in High-Performance Contracts, | 11 |
| A. Defining the Performance Contract, | 11 |
| B. Whether Standards Are Required, | 12 |
| C. Performance Standards Used by Transit Agencies, | 13 |
| D. Use of Surveillance, | 14 |
| V. Transit Agency Experience in Using Incentive Payment and Liquidated-Damages Clauses, | 15 |
| A. Best Practices in the Use of Incentive Clauses, | 15 |
| B. Incentive Payments Made by Transit Agencies, | 16 |
| C. Examples of Incentive Payment Clauses Used by Transit Agencies, | 17 |
| D. Best Practices in the Use of Liquidated-Damages Clauses, | 19 |
| E. Liquidated Damages Collected by Transit Agencies, | 22 |
| F. Examples of Liquidated-Damages Clauses Used by Transit Agencies, | 23 |
| G. The Use of Dispute Resolution Boards, | 24 |
| VI. Transit Agencies' Evaluation of Performance-Based Contracting, | 25 |
| A. Transit Agencies' Success with Incentive Payments and Liquidated-Damages Clauses, | 25 |
| B. Risks in Using Incentive Payment and Liquidated-Damages Clauses, | 25 |
| C. The Effect of Incentive Payment and Liquidated-Damages Clauses on Contract Claims, | 26 |
| D. Potential Claims in Connection with Performance-Based Contracting, | 26 |
| Conclusion, | 31 |
| Appendix A: Survey Questions, | 33 |
| Appendix B: List of Transit Agencies Responding to the Survey, | 38 |
| Appendix C: Index to Performance-Based Clauses and Standards (available on CRP-CD-134), | 40 |

CONTRACTUAL MEANS OF ACHIEVING HIGH-LEVEL PERFORMANCE IN TRANSIT CONTRACTS

By Larry W. Thomas, The Thomas Law Firm, Washington, DC

I. INTRODUCTION

Because of financial pressures and conditions within the transit industry, it is now more important than ever to require that transit contracts be performed on time and within an agency's budget. Performance contracting may be used for all types of contracts—construction, services, procurement, or maintenance and repair—to obtain timely or early completion of contracts. Thus, performance-based contracting may include incentives for early or enhanced performance and liquidated damages for delay.

In addition, transit agencies may employ performance standards in determining and awarding incentive payments for early or on-time completion or when assessing liquidated damages for delay. A study for the North Carolina Department of Transportation (DOT) found that the use of performance measures is now quite common in general and in public transportation in particular.¹ Although the study concluded that there were appropriate performance measures for transit agencies to use, the focus of the study was the state DOT's use of performance measures when allocating funding to transit systems.²

A nationwide survey of transit agencies of all sizes was undertaken for this digest to obtain information regarding transit agencies' success or failure in using performance-based provisions in their contracts;³ to identify any legal or other restrictions on their use of incentives or liquidated damages in their contracts;⁴ to obtain information on how the agencies determine the amounts of incentives and liquidated damages to specify in their contracts;⁵ to ascertain whether there are any risks or adverse consequences associated with the use of such clauses, such as litigation, claims, delays, limiting of competition, prob-

lems in enforcement, or increased costs;⁶ to evaluate the contractual provisions that have been successful;⁷ and to identify the best practices for their use to achieve early or on-time performance.⁸

Forty-four transit agencies responded to the survey (see Table 1). Twenty-seven agencies reported that they are using performance-based contracting (e.g., incentive-payment or liquidated-damages clauses) in construction contracts, maintenance and repair contracts, service contracts, and procurement contracts, such as for materials, supplies, or rolling stock. Seventeen respondents stated that they were not using performance-based contracting. Some agencies are using liquidated-damages clauses but are not paying incentives; for example, Omnitrans in California stated that its current procurement policy does not provide for the payment of any incentive awards or bonuses to a contractor for early or on-time completion.⁹

Table 1. Transit Agencies' Use of Performance-Based Contracting.

| | |
|--|----------|
| Agencies using performance-based contracting | 27 (61%) |
| Agencies not using performance-based contracting | 17 (39%) |

Section II of the digest discusses the use of incentive clauses and liquidated-damages clauses in contracts with Federal Transit Administration (FTA) funding, including FTA's New Starts program. In particular, Section II discusses incentive payments that may be made for value engineering (VE).

Section III of the digest discusses the statutory and other authority for the use of incentive-payment and liquidated-damages clauses in transit agency contracts, whether any agencies are precluded in some states from using the clauses in certain types of contracts, and whether bonding or insurance requirements impose any limitations on the use of the clauses.

Section IV of the digest discusses the use of performance standards in defining a high-performance

¹ THOMAS J. COOK & JUDSON J. LAWRIE, USE OF PERFORMANCE STANDARDS AND MEASURES FOR PUBLIC TRANSPORTATION SYSTEMS 1, 2 (NCDOT Research Project 2004-10, Final Report, FHWA/NC/2004-10, in cooperation with North Carolina Department of Transportation and Public Transportation Group, Institute for Transportation Research and Education, North Carolina State University, Sept. 2004), available at <http://www.ncdot.gov/doh/preconstruct/tpb/research/download/2004-10FinalReport.pdf>.

² *Id.* at 17, 59.

³ See § III.C.2 and § VI.A.

⁴ See §§ III.A and B.

⁵ See §§ IV.A, C, and D and §§ V.A, C, and F.

⁶ See §§ VI.B, C, and D.1.

⁷ See § III.C.2 and §§ VI.A and B.

⁸ See §§ V.A and D.

⁹ Survey response of Omnitrans.

contract, the criteria to consider when writing performance standards, and the surveillance methods used by transit agencies to assure compliance with the standards and delivery deadlines in contracts.

Section V of the digest discusses the transit agencies' best practices when using incentive-payment and liquidated-damages clauses in their contracts, the extent to which agencies responding to the survey are paying incentives or collecting liquidated damages, and examples of incentive-payment and liquidated-damages clauses that transit agencies are using.

Section VI of the digest discusses the transit agencies' evaluation of performance-based contracting; the effect of the incentive-payment and liquidated-damages clauses on claims against transit agencies; and the potential for claims by contractors for a contractor's additional costs if a contractor accelerates performance of a contract to meet an incentive-payment or avoid a liquidated-damages deadline under the contract; and other issues such as the need for carefully drafted contractual provisions to reduce the risk of claims.

Finally, it may be noted that the transit agencies' responses to the survey are discussed throughout the digest. Appendix C contains examples of incentive-payment and liquidated-damages clauses and performance standards now being used by transit agencies in their various contracts, such as for construction projects or for the procurement of capital equipment or services.

II. THE USE OF INCENTIVE AND LIQUIDATED-DAMAGES CLAUSES IN CONTRACTS WITH FTA FUNDING

A. Introduction

Liquidated-damages and incentive clauses may be used by a grantee for any project receiving financial assistance from the FTA, including funding for fixed guideways and for equipment and other capital acquisitions. The payment of VE incentives also is authorized.

B. FTA New Starts Program

An important part of FTA's funding of transit agencies is the New Starts program, which applies to a new fixed guideway system or to an extension of an existing fixed guideway system.¹⁰ A "fixed guideway" is a public transportation facility using and occupying a separate right-of-way or rail for the exclusive use of public transportation and other high-occupancy vehicles or "using a fixed catenary system and a right-of-way usable by other forms of transportation."¹¹ A fixed guideway system includes a rapid rail, light rail, commuter rail, or automated guideway transit system; people movers; ferry boat service; and fixed guideway facilities for buses (such as for bus rapid transit) and other high-occupancy vehicles.¹² Part

611(a) of Title 49 of the Code of Federal Regulations (C.F.R.) governs the process that applicants must follow for capital investment grants and loans for new fixed guideway systems or extensions of existing systems. However, Part 611 does not apply "if the total amount of funding from 49 United States Code (U.S.C.) 5309 will be less than \$25 million, or if such projects are otherwise exempt from evaluation by statute."¹³

It may be noted that there are incentives for grantees under the New Starts/Small Starts Program authorized by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU).¹⁴ As explained in the FTA Contractor Performance Incentive Report (CPIR), "[f]or grantees, SAFETEA-LU authorizes the Secretary to allow for additional scope to be added to a Full Funding Grant Agreement (FFGA) project if the final cost comes in below the original FFGA project cost, 49 U.S.C. 5309(h)(2)."¹⁵ Furthermore, a grantee may receive a higher share of federal funding when the Secretary determines that "the net project cost of the project is not more than 10 percent higher than the net project cost estimated at the time the project was approved for advancement into preliminary engineering" and that "the ridership estimated for the project is not less than 90 percent of the ridership estimated for the project at the time the project was approved for advancement into preliminary engineering...."¹⁶

C. Funding of Capital Projects

In August 2008, FTA submitted a Report to Congress on Incentives in Federal Transit Formula Grant Programs.¹⁷ As the report notes, pursuant to 49 U.S.C. § 5307 and 49 U.S.C. § 5311, respectively, there are two incentives, one for urbanized areas (§ 5307) and one for rural and small urban areas (§ 5311). An urbanized area is one with a population of not less than 50,000 people.¹⁸

D. Use of Value Engineering

A Transportation Research Board Synthesis states that a VE incentive clause may be used in connection with a construction project.¹⁹ At the time of the Synthe-

¹³ *Id.* § 611.3(b).

¹⁴ 49 U.S.C. § 5309(d).

¹⁵ FED. TRANS. ADM., OFFICE OF BUDGET AND POLICY, CONTRACTOR PERFORMANCE INCENTIVE REPORT 2 (Nov. 20, 2006) (hereinafter "CPIR"), available at <http://www.fta.dot.gov/documents/ContractorPerformanceIncentiveReport102006.pdf>.

¹⁶ *Id.* (citations omitted).

¹⁷ SEC'Y OF TRANSP., REPORT TO THE UNITED STATES CONGRESS PURSUANT TO 49 U.S.C. § 5336(c) (Aug. 2008), available at http://www.fta.dot.gov/documents/Incentives_Report_-_Final_As_Approved_8-14-08.pdf.

¹⁸ 49 U.S.C. § 5302(a)(17).

¹⁹ JOEL T. CALLAHAN, MANAGING TRANSIT CONSTRUCTION CONTRACT CLAIMS 18 (Transit Cooperative Research Program Synthesis 28, 1998), available at <http://onlinepubs.trb.org/>

¹⁰ 49 C.F.R. § 611.5.

¹¹ 49 U.S.C. § 5302(a)(4)(A) and (B).

¹² 49 C.F.R. § 611.5.

sis, 90 percent of the reporting agencies used VE during the design phase. According to the Construction Project Management Handbook (CPMH), a

project manager should encourage contractors to raise VE ideas and the Agency to include incentives in construction contracts for contractors to propose VE changes to the work called for in the drawings and specifications. If the proposed changes are acceptable to the Agency the cost savings could be shared between the Agency and the contractor.²⁰

VE “reflects an effort by the government to reward the contractor for its initiative by permitting it to share in this reduced cost of the work.”²¹ The Federal Acquisition Regulations (FAR), which provide guidance on the use of VE for various types of contracts, includes specific VE clauses to be used.²² FAR Section 48.202 requires the insertion of a VE clause in construction solicitations and contracts exceeding a certain amount.²³ According to FTA’s most recent circular on the subject, first, the Common Grant Rule for governmental recipients encourages them to use VE clauses in contracts for construction projects.²⁴ Second, the FTA “generally will not approve a New Starts grant application for final design funding or a full funding grant agreement until value engineering is complete.”²⁵ If a contract, such as a design-build contract, includes value engineering, “FTA does not require separate value engineering proposals, contract changes, or other

processes.”²⁶ FTA states, moreover, that “[f]rom a procurement view, the concept of value engineering is more important than the form it takes.”²⁷

Transit agencies reported on whether they have made incentive payments during the most recent 3-year period to contractors for submitting proposals that reduced the cost of a project (Table 2). Nineteen agencies said that they had not, whereas four agencies reported that they had made such payments. The Southeastern Pennsylvania Transportation Authority (SEPTA) reported paying \$234,000 for VE.²⁸

onlinepubs/tcrp/tsyn28.pdf (stating that “[t]he objective of value engineering during the design stage of a project is to ensure that the completed facility is adequate for its function at the lowest life-cycle cost reasonable”).

²⁰ *Construction Project Management Handbook* at 6-6, hereinafter cited as “CPMH,” available at <http://www.fta.dot.gov/documents/FTA-CONSTRUCTION-PRJT-MGMT-HDBK2009.pdf>, last accessed May 31, 2012.

²¹ SMITH, CURRIE & HANCOCK, FEDERAL GOVERNMENT CONSTRUCTION CONTRACTS, A PRACTICAL GUIDE FOR THE INDUSTRY PROFESSIONAL 309 (Thomas J. Kelleher, Jr., Thomas E. Abernathy IV, Hubert J. Bell, Jr., & Steven L. Reed, Eds., John Wiley & Sons, Inc., 2d ed. 2010) (hereinafter cited as “Smith, Currie & Hancock”).

²² *Id.* See FAR §§ 48.001 and 52.248-3.

²³ Subpart 48.202. Clause for construction contracts, states,

The contracting officer shall insert the clause at 52.248-3, Value Engineering—Construction, in construction solicitations and contracts when the contract amount is estimated to exceed the simplified acquisition threshold, unless an incentive contract is contemplated. The contracting officer may include the clause in contracts of lesser value if the contracting officer sees a potential for significant savings. The contracting officer shall not include the clause in incentive-type contraction contracts. If the head of the contracting activity determines that the cost of computing and tracking collateral savings for a contract will exceed the benefits to be derived, the contracting officer shall use the clause with its Alternate I.

See also FAR § 52.248.3.

²⁴ FTA Circular 4220.1F, at IV-28, http://www.fta.dot.gov/documents/FTA_Circular_4220.1F_-_Finalpub1.pdf.

²⁵ *Id.*

²⁶ *Id.*

²⁷ *Id.*

²⁸ Survey response of Southeastern Pennsylvania Transportation Authority (SEPTA).

Table 2. Incentive Payments to Contractors for Proposals Reducing Project Cost for the Most Recent 3-Year Period.

| | No. of Agencies |
|--|-----------------|
| Agencies that had paid incentives | 4 (15%) |
| Agencies that had not paid incentives | 19 (70%) |
| Agencies for which information was not available or that did not respond | 4 (15%) |

In contrast, according to the Washington State DOT, the department has used an early completion incentive to reward contractors for the early completion of a project or a phase of a project, thereby reducing the impact of construction projects on the public.²⁹ On some projects, contracts permitted contractors to bid the amount of time needed to perform the work for which the department paid a premium for early completion.³⁰

The department also pays performance contracting rewards to contractors for submitting ideas that lower the cost of a project, referred to as Cost Reduction Incentive Proposals or CRIPs.³¹ Thus, the department uses performance contracting to reward contractors throughout a project for providing consistent, on-time, high-quality performance.³² Since 2000, Washington State DOT has used performance contracting to pay more than \$4.5 million in schedule-related incentives on 61 completed contracts.³³ The department paid more than \$836,000 in incentives, averaging almost \$70,000 per contract, on 12 contracts completed in 2009.³⁴

E. Value Engineering Clauses

The Massachusetts Bay Transportation Authority's (MBTA) General Conditions include a provision authorizing payments for VE. In brief, the provision permits a contractor to submit a proposal for a cost reduction that is based on a "sound study" conducted by the contractor that will result in a net saving to the agency. The proposal must be one that does not impair the project or require an "unacceptable extension" of the contract. The submission must describe the pro-

posed change and the difference it will make in the existing contract and estimate the reduction in the cost of the contract. The decision of the agency whether to accept the proposal is final, and, if accepted, there is an equitable adjustment in the contract price by reducing the price by the amount of the "estimated decrease in the cost of performance minus 50 percent of the difference...." Thus, the agency and the contractor share equally in the saving of the cost of performance because of the contractor's proposal.

The aforesaid MBTA contractual provision states in full as follows:

1.1 CONTRACTOR COST REDUCTION PROPOSALS VALUE ENGINEERING (APPLICABLE TO CONTRACTS IN EXCESS OF \$200,000)

A. The Contractor may submit cost reduction Proposals for changing the Contract requirements. The Proposals shall be based upon a sound study made by the Contractor indicating that the Proposal:

1. Will result in a net reduction in the total Contract cost to the Authority;
2. Will not impair any essential form, fit, function, or characteristic of the Work, such as safety, service life, reliability, economy of operation, ease of maintenance, and necessary standardized features;
3. Will not require an unacceptable extension of the Contract completion time; and
4. Will require a Change Order to the Contract.

B. Cost reduction or Value Engineering Proposals shall be processed in the same manner as prescribed for any Contract initiated Proposal which would necessitate issuance of a Change Order. The Contractor shall submit the following information as a minimum, with each Cost reduction Proposal:

1. A description of the difference between the existing Contract requirements and the proposed change, and the comparative advantages and disadvantages of each;
2. An itemization of the requirements of the Contract which must be changed if the Proposal is adopted and a recommendation as how to make such change (e.g., suggested revision);

²⁹ Washington State Dep't of Transp., *Performance Contracting at the Washington State Department of Transportation* (undated), available at http://www.ofm.wa.gov/contracts/resources/performance_based/performance_contracting_wsdot.pdf.

³⁰ *Id.*

³¹ *Id.*

³² *Id.*

³³ *Id.*

³⁴ *Id.*

3. An estimate of the reduction in Contract performance costs that will result from adoption of the Proposal, taking into account the cost of implementation by the Contractor (including any amount attributable to subcontracts in accordance with Paragraph E. below and the basis for the estimate).

4. A statement of the time by which a Change Order must be issued so as to obtain the maximum cost reduction during the remainder of this Contract, noting any effect of the Contract delivery schedule.

C. The Authority will not be liable for any delay in acting upon, or for failure to act upon, any Value Engineering Proposal submitted pursuant to this Article. The decision of the Authority as to the acceptance of any such Proposal shall be final. The Authority may accept in whole or in part, any Proposal submitted pursuant to this Article by issuing a Change Order. Unless and until a Change Order is issued, the Contractor shall remain obligated to perform in accordance with the terms of the Contract.

D. If a Value Engineering (cost reduction) Proposal is accepted and applied, an equitable adjustment in the Contract price and in any other affected provisions will be made. The equitable adjustment in the Contract price will be established by determining the total estimated decrease in the Contractor's cost of performance resulting from the accepted changes, taking into account the Contractor's cost of implementing the change (including any amount attributable to subcontracts in accordance with Paragraph E. below). The Contract price shall be reduced by such total estimated decrease in the cost of performance minus 50 percent of the difference between the amount of such total estimated decrease and any ascertainable collateral costs to the Authority which must reasonably be incurred as a result of application of the cost reduction Bid.

E. The Contractor shall include appropriate value engineering arrangements in any subcontract, which, in the judgment of the Contractor, is of such a size and nature as to offer reasonable likelihood of cost reductions. In computing any equitable adjustment in the Contract price under Paragraph D., the Contractor's cost of implementation of a Value Engineering Proposal which is accepted shall include any implementation cost of a Subcontractor and any value engineering incentive payments to a Subcontractor, which clearly pertain to such Proposal and which are incurred, paid or accrued in the performance of a subcontract.

F. The Contractor may restrict the Authority's right to see any portion of the Contractor's Proposal by marking it with the following requirement:

1. This data, furnished pursuant to Article 2.4 of the General Conditions of Contract No. _____ may not be duplicated, used or disclosed, in whole or in part, for any purpose except for evaluation, unless the Proposal is accepted by the Authority. This restriction does not limit the Authority's right to use information contained in this data if it is or has been obtained, or is otherwise available, from the Contractor or from another source, without limitations. When this Proposal is accepted by the Authority, the Authority will have the right to duplicate, use, and disclose any data in any manner and for any purpose whatsoever, and have others do so whether under this or any other Authority contract.

G. Contract modifications made as a result of this Article will state that they are made pursuant to it.³⁵

Other agencies supplied examples of their contracts with VE clauses, including:

- A value engineering change proposal (VECP) specifying the conditions under which a VECP will be considered;³⁶ and
- Other VE provisions and cost reduction incentives.³⁷

In replying to the survey questions, one agency stated that it had made incentive payments on its construction projects for VE, the costs of which "are shared with the contractor on a 50% basis."³⁸ Although stating that it had not made incentive payments, Metropolitan Transit Authority's Metro-North Railroad (Metro-North) stated that its contracts contain a VE clause that permits compensation to be paid to a contractor for "an amount equal to 50% of the savings to Metro-North to be determined by calculating the difference between the cost of the original workscope and the revised workscope."³⁹

III. AUTHORITY FOR THE USE OF INCENTIVES AND LIQUIDATED-DAMAGES CLAUSES IN TRANSIT AGENCY CONTRACTS

A. Statutory and Regulatory Authority

According to the FTA's CPIR, not only are many contracts throughout the nation already providing for the payment of incentives to contractors, but also no new additional authority for the use of incentive provisions is needed in contracts funded under the New Starts process.⁴⁰ The only limitations on the use of incentives are those in other federal and state laws. Thus, "[c]ontracts to support New Starts project grantees are subject to the same rules and regulations as are other procurement contracts..."⁴¹ The applicable federal law includes the Common Grant Rule Procurement regulations, 49 C.F.R. § 18.36; the laws applicable to New Starts grantees, 49 U.S.C. Chapter 53;⁴² and FTA's guidance on third-party contracting in FTA Circular 4220.1F (November 1, 2008).⁴³ The Circular sets forth the requirements to which a grantee must adhere with respect to the solicitation, award, and administration of third-party con-

³⁵ MBTA, App. 3, at A3-73–A3-76.

³⁶ MTA Metro-North, App. 3, at A3-78–A3-81.

³⁷ Orange County Transp. Auth., App. 3, at A3-82–A3-87; SANDAG, App. 3, at A3-88–A3-92 § 5-1.16.

³⁸ Survey response of LACMTA.

³⁹ Survey response of MTA Metro-North.

⁴⁰ CPIR, *supra* note 15.

⁴¹ *Id.* at 4.

⁴² *Id.*

⁴³ *Id.* at 5.

tracts. Although FAR subpart 16.4⁴⁴ is “helpful,” the FAR is not binding on FTA grantees.⁴⁵

As FTA notes, state law applies to grantee procurements, “particularly with respect to completion requirements and contracting procedures....”⁴⁶ Thus, when an agency is “procuring property and services under a grant or cooperative agreement, a State may use the same procurement policies and procedures that it uses for acquisitions not financed with Federal assistance.”⁴⁷ The FTA cautions, however, that “[s]tate contract law may limit a grantee’s ability to use incentive contracts, and, in several instances, may expressly prohibit a grantee’s ability to use mechanisms like Design-Build, DBOM [Design-Build-Operate-Maintain], and CM/GC [Construction Manager/General Contractor]”⁴⁸ Another possible limitation is a grantee’s inability to manage a complex or sophisticated contract.⁴⁹

State law may authorize the use of incentives. For example, in Florida, the chapter on public transportation provides:

If the department determines and adequately documents that the timely completion of any project will provide a substantial benefit to the public health, safety, or welfare; will limit the disruptive effect of construction on the community; or is cost beneficial on a revenue-producing project, *the contract for such project may provide for an incentive payment payable to the contractor for early completion of the project or critical phases of the work and for additional damages to be assessed against the contractor for the completion of the project or critical phases of the work in excess of the time specified.* All contracts containing such provisions shall be approved by the head of the department or his or her designee. The amount of such incentive payment or such additional damages shall be established in the contract but shall not exceed \$10,000 per calendar day, except that for revenue-producing projects the amounts and periods of the incentive may be greater if an analysis indicates that additional revenues projected to be received upon completion of the project will exceed the cost of the incentive payments.⁵⁰

(Emphasis added.)

As for whether transit agencies are precluded from using incentive and liquidated-damages clauses in any contracts, although 20 agencies stated that they were not precluded from doing so, 3 agencies did report that they are subject to some limitations. In the case of the Central Oklahoma Transportation and Parking Authority (COTPA), the agency as a public trust may not use DBOM, CM/GC contracts⁵¹ By statute, the Connecticut

DOT is not permitted to utilize Design-Build (DB) or DBOM contracting methods. The MBTA stated that it may not provide for incentives in a Construction Manager at Risk contract because the “CM at Risk Statute MGL 149A, Section 7 limits cost sharing incentives.”⁵²

B. Bonding and Insurance Limitations

Transit agencies responding to the survey did not note any limitations imposed by bonding or insurance agencies on their use of incentives or liquidated-damages clauses. However, one agency’s policy on determining the amount of liquidated damages to specify in a contract states that it is important not to have “open-ended, uncapped liquidated damages.”⁵³ Besides being a detriment to competition that may result in an increase in the bid amounts, when “a surety bond is being required for the contract, uncapped liquidated damages may become a detriment to obtaining a bond. The contract, therefore, should include an overall maximum dollar amount or period of time, or both, during which liquidated damages may be assessed.”⁵⁴

Section VI.D discusses best practices in the use of liquidated-damages clauses, including the legal requirements for an enforceable liquidated-damages clause, guidelines for determining the amount of liquidated damages, and guidelines for drafting a liquidated-damages clause.

C. Suitability of Grantees, Contractors, and Contracts for High-Performance Contracts

1. Suitability of Grantees and Contractors

There are two broad categories of contractors, the first category including “professional services contractors like engineering and architectural companies, environmental, and project management consultants....”⁵⁵ The second category of contractors includes companies that “perform demolition, construction, testing, and project management....”⁵⁶ In regard to the suitability of contractors or grantees, “only those construction contractors that can directly influence the final cost of the project...are best suited to receive incentives based upon project cost” and “only the more experienced grantees are likely to be able to successfully employ these more complex or sophisticated incentives and innovative procurement practices.”⁵⁷

The FTA advises that incentive contracts are suitable in two areas—when contractors are influential in forecasting final project costs and when they are influential in meeting final project costs.⁵⁸ With respect to

⁴⁴ Available at <https://www.acquisition.gov/far/>.

⁴⁵ FTA, Incentive Contracts, available at http://www.fta.dot.gov/13057_6148.html; see FTA Circular 4220.1F, *supra* note 24, at II-9.

⁴⁶ CIPR, *supra* note 15, at 5.

⁴⁷ FTA Circular 4220.1F, *supra* note 24, at II-2.

⁴⁸ CIPR, *supra* note 15, at 11.

⁴⁹ *Id.* at 1.

⁵⁰ FLA. STAT. § 337.18(4)(a) (statute appearing in Tit. 26, Public Transportation).

⁵¹ Survey response of COTPA.

⁵² Survey response of MBTA.

⁵³ LYNX, App. 3, at A3-13–A3-14.

⁵⁴ *Id.*

⁵⁵ CIPR, *supra* note 15, at 5.

⁵⁶ *Id.* at 6.

⁵⁷ *Id.* at 1.

⁵⁸ CIPR, *supra* note 15, at 10.

the early planning and preliminary engineering phases of a project, however, contractors are “heavily influenced by assumptions and information beyond the contractor’s control and project completion may occur many years after the foregoing preliminary phases.”⁵⁹ Hence, the use of incentives for those stages may be difficult. The FTA advises that it is during the final design and construction phases that the use of incentives may be more feasible but that the construction phase is “[t]he most appropriate phase...for providing contractor incentives linked to projects completed below the original cost estimate....”⁶⁰

As seen in Table 3 below, of the 27 agencies responding that they use performance-based contracting, 25 do so in their construction contracts. Sixteen agencies use the provisions in their procurement of rolling stock and other capital equipment. Ten agencies are using liquidated damages or incentive payment clauses in the procurement of services, including professional services such as for architects, engineers, or others. As for other types of contracts, eight agencies reported using the clauses in contracts for maintenance and repairs; five agencies do so in their management contracts; five use them in their procurement of materials; and four use them in the procurement of supplies.

⁵⁹ *Id.*

⁶⁰ *Id.* at 11.

Table 3. Types of Contracts in Which Transit Agencies Use Incentive Payment and Liquidated-Damages Clauses.

| Type of Contract | No. of Agencies |
|---|-----------------|
| Construction | 25 (93%) |
| Management | 5 (19%) |
| Maintenance and repairs | 8 (30%) |
| Procurement of materials | 5 (19%) |
| Procurement of supplies | 4 (15%) |
| Procurement of rolling stock or other capital equipment | 16 (60%) |
| Procurement of services, including procurement of professional services | 10 (37%) |

2. Types of Suitable Contracts

Although written from the perspective of the energy services industry, one commentator argues that “[a]nother critically important characteristic of performance contracting, but which is overlooked or misunderstood by many buyers, especially public agencies, is that performance contracting is a design-build process.”⁶¹ The writer argues that

[b]ecause of this design-build nature of performance contracting, and the fact that performance contracts frequently have a very broad scope (covering an entire facility and the majority of its infrastructure systems), the relationship between the parties and the process that is used to create and implement a project assumes new and much greater importance.⁶²

Nevertheless, the FTA states that the use of incentives is feasible in all New Start projects but that they are more suitable in some contracts for projects than others.⁶³

There are two typical types of incentives used by grantees in the New Start process: award fee, and incentive fee. Both Cost-Plus and Fixed Price contracts can contain these types of incentives, but with very different goals in mind.

Cost-Plus Incentive Fee and Fixed Price Incentive Fee contracts provide incentives to the contractor strictly on cost-based, quantitative evaluation of contract work. In these contracts, a fee is awarded to the contractor based upon the ability of that contractor to meet the targeted cost. There is no evaluation of the quality of the work, just that the work was done and—hopefully—under the target project cost.

Cost-Plus Award Fee and Fixed Price Award Fee contracts provide incentives to the contractor based upon the quality or performance of the contract work. In these contracts, the contractor is evaluated using qualitative measures, and an award is given if the work meets or exceeds certain performance standards.⁶⁴

As explained by the FTA, “[a] cost-plus contract is a contract framed in such a way that when the contractor finishes the agreed upon work, it receives compensation equal to its expenses plus some bonus, which for Federally assisted contracts can be a fixed amount.”⁶⁵ The CPIR states that “[t]ypical uses of cost-based contracts within the New Starts process are for professional services, program management, feasibility studies, environmental assessments, alternatives analysis that supports project development and delivery of construction work.”⁶⁶ Under 49 C.F.R. § 18.36(f)(4), contracts may not be awarded on the basis of cost plus a percentage of cost.

With a fixed-price contract, when a contractor “finishes the agreed-upon work, it will only receive the amount reflected in its bid price...regardless of what costs it incurred.”⁶⁷ Such contracts “are typical for construction, system/vehicle procurement, and other aspects of development when a specific product/deliverable is expected.”⁶⁸ The CPIR discusses in more detail other types of contracts such as DB, DBOM,

⁶⁴ *Id.* at 7. There are two classes of contracts for procuring construction services, cost reimbursement or cost-plus and fixed price. *Id.* at 6. A contractor assumes a lower risk with a cost-plus-incentive fee, cost-plus-award fee, or cost-no-fee contract, whereas the contractor assumes a higher degree of risk with a fixed-price incentive fee, fixed-price-award fee, or firm-fixed-price contract. *Id.*

⁶⁵ *Id.* at 7.

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ *Id.*

⁶¹ JAMES P. WALTZ, *MANAGEMENT, MEASUREMENT & VERIFICATION OF PERFORMANCE CONTRACTING* 8 (The Fairmont Press, Inc. 2003).

⁶² *Id.*

⁶³ CPIR, *supra* note 15, at 11.

and CM/GC.⁶⁹ The appendix to the CPIR has additional information on the types of contracts and when their use is suitable.

Transit agencies responding to the survey reported on the kinds of contracts in which they are including high-performance clauses. The agencies did not report that there were any specific issues or problems with the use of incentive-payment or liquidated-damages clauses because of the type of contract in which they were included. Fixed-fee contracts are the type of contract most frequently mentioned by transit agencies.⁷⁰ Other types of contracts with incentive payment or liquidated-damages clauses include DB,⁷¹ cost plus,⁷² cost plus performance fee,⁷³ time and materials,⁷⁴ time and expense,⁷⁵ and CM/GC.⁷⁶

One agency stated that it uses the clauses in all types of contracts.⁷⁷ The Central Ohio Transit Authority (COTA) uses fixed price requirements contracts for comprehensive transportation services for seniors with disabilities.⁷⁸ The Capital Metropolitan Transportation Authority (Capital MTA) in Austin, Texas, stated that most of its contracts are “firm fixed price.”⁷⁹

Our specification or scope of services contains enough information to allow the bidders to provide a fixed price. Firm fixed price contracts reduce the Authority’s risk by transferring the risk to the contractor. We have also used the cost plus fixed fee along with a firm fixed price contract. The cost plus portion applied to the startup phase due to the unknown elements that were involved with the startup of a new rail service. After the startup phase the contract was a firm fixed price based on vehicle hours of service.⁸⁰

Dallas Area Rapid Transit (DART) states that it uses performance-based contracting in CM/GC, DB, and cost-plus-fixed-fee (design and planning services) contracts.⁸¹ Metro-North utilizes a hybrid, performance-based contract but depending on state or federal funding (construction versus services or materials) may include liquidated-damages clauses.⁸² The MTA New

⁶⁹ See *id.* at 8–9.

⁷⁰ Survey responses of COTPA (described as fixed cost), Fort Worth Trans. Auth., Greater N.H. Transit Dist., Lane Transit Dist., LYNX, MBTA (“sum not to exceed for construction contracts”), NYC Transit, OCTA (fixed price), San Joaquin RTD, and SEPTA.

⁷¹ Survey responses of LYNX, MBTA (stating that it has just started with DB), SEPTA, Stark (only DB), Utah Transit Auth.

⁷² Survey responses of San Joaquin RTD and SEPTA.

⁷³ Survey response of San Mateo County Transit Dist.

⁷⁴ Survey response of Fort Worth Trans.

⁷⁵ Survey response of Orange County Transp. Auth.

⁷⁶ Survey response of Utah Transit Auth.

⁷⁷ Survey response of LACMTA.

⁷⁸ Survey response of COTA.

⁷⁹ Survey response of COTA.

⁸⁰ *Id.*

⁸¹ Survey response of DART-Dallas.

⁸² Survey response of MTA Metro-North.

York City Transit (NYCT) reports that it includes liquidated-damages clauses in lump-sum, firm-fixed-price construction contracts, in various operating contracts, and in capital contracts for rolling stock.⁸³ Omnitrans in California reports that it has used the clauses successfully in time and materials/labor hour contracts, firm-fixed-price, and DB contracts with performance-based clauses.⁸⁴ San Diego Association of Governments (SANDAG) advises that it has had a fixed-fee contract with performance-based incentives for one project in the past 3 years.⁸⁵ The San Diego Metropolitan Transit System (San Diego MTS) reports that its two-step service contracts have been successful with the first step to determine qualified, responsive proposals and the second step to negotiate terms with finalists.

The agencies did not indicate that a particular type of contract or incentive-payment or liquidated damages-clause was more successful or perilous than another one. The agencies’ evaluations of the contracts and clauses were more general in nature but supportive of the use of such clauses in their contracts. The agencies did not indicate any problems in soliciting and obtaining contractors for a project, procurement, or service because of the inclusion, for example, of a liquidated-damages clause.

3. Performance Guarantees

According to one source, “[o]ne of the dominant features of performance contracting since its inception has been the inclusion of a performance guarantee.”⁸⁶ As seen in the discussion of Table 4 in Section IV, 13 agencies responding to the survey report that they also include performance guarantees in their contracts.

IV. THE USE OF STANDARDS IN HIGH-PERFORMANCE CONTRACTS

A. Defining the Performance Contract

One of the keys to effective performance contracting is well-defined performance standards. If performance standards are to be used, they should include all criteria important for measuring performance and set forth definitive and objective means and schedules for monitoring performance. In a study of federal contracts conducted by the then General Accounting Office (GAO) for the House Committee on Government Reform, Subcommittee on Technology and Procurement Policy, the GAO emphasized that performance-based contracts should have the following attributes:

- A description of the requirements in terms of results rather than the methods of performance of

⁸³ Survey response of NYCT.

⁸⁴ Survey response of Omnitrans.

⁸⁵ Survey response of SANDAG (*citing* the Catenary Contact Wire Replacement Project, CIP 1142000, Contract 5001200, Mar. 2010).

⁸⁶ WALTZ, *supra* note 61, at 21.

the work—“what is to be performed rather than how to perform it.”⁸⁷

- Measurable performance standards set “in terms of quality, timeliness, and quantity” that are “not unduly burdensome.”⁸⁸

- A description of how a contractor’s performance will be evaluated in a quality assurance phase, which “should include a surveillance schedule and clearly state the surveillance methods to be used.”⁸⁹

- An identification of the positive and negative incentives to be used that “apply to the most important aspects of the work.”⁹⁰

However, the GAO reported that some agencies were too “prescriptive” in their approach to performance contracting as the agencies did not encourage contractors to find better, more cost-effective ways of doing business using performance-based contracting.⁹¹ The GAO study stated that for more complex contracts and high-risk projects agencies had “found that they could not forego maintaining a strong role in specifying how the work should be done as well as overseeing the work.”⁹² Thus, the GAO concluded that with some performance-based contracts there still will be “complex situations [that] require strong government oversight.”⁹³

With respect to contracts for services, the GAO also found that the contracts “lend themselves to performance-based contracting” in part because the government is not required “to specify numerous unique requirements or to play a strong role in how the contract is executed.”⁹⁴

One commentator notes that “[w]ith rare exceptions, the installation and construction work on a performance contract always needs to be designed in a somewhat formal process”⁹⁵ and that “the planning for and implementation of measurement and verification steps must begin *at the very beginning* of a project.”⁹⁶ Furthermore, “[p]erformance measurement means that governments specify what they want and formulate performance indicators to let them know if the objectives set out at the beginning have been achieved.”⁹⁷ Thus, in a performance contract,

⁸⁷ U.S. GEN. ACCOUNTING OFFICE, CONTRACT MANAGEMENT GUIDANCE NEEDED FOR USING PERFORMANCE-BASED SERVICE CONTRACTING 3–4 (GAO-02-1049, Sept. 2002) (hereinafter cited as “GAO Report”), available at <http://www.gao.gov/new.items/d021049.pdf>.

⁸⁸ *Id.* at 4.

⁸⁹ *Id.*

⁹⁰ *Id.*

⁹¹ *Id.* at 2.

⁹² *Id.* at 7.

⁹³ *Id.* at 8.

⁹⁴ *Id.* at 5.

⁹⁵ WALTZ, *supra* note 61, at 57.

⁹⁶ *Id.* at 24.

⁹⁷ GAVIN DREWRY, CARSTEN GREVE, & THIERRY TANQUEREL, CONTRACTS, PERFORMANCE MEASUREMENT AND ACCOUNTABIL-

“[g]overnments tend to put more focus on output-control than on the control of inputs. Outputs are made subject to various forms of audit, and auditing can be seen as an integrated part of a wider search for accountability.”⁹⁸

In regard to specifications included in a performance contract, a “contractor has general discretion and election as to the detail, but the work is still subject to the government’s reserved right of final inspection and approval or rejection.”⁹⁹ As the Court of Claims explained in *J.L. Simmons Co. v. United States*, design specifications may “set forth in precise detail the materials to be employed and the manner in which the work [is] to be performed....”¹⁰⁰ “In contrast, typical “performance” type specifications set forth an objective standard to be achieved, and the successful bidder is expected to exercise his ingenuity in achieving that objective or standard of performance, selecting the means and assuming a corresponding responsibility for that selection.”¹⁰¹

A contract may have “composite specifications”—“literally a composite of two or three specification types and, as such, may contain design characteristics, performance features, or purchase elements.”¹⁰²

The Connecticut DOT stated that it “includes liquidated damages provisions in all construction contracts and may, at times, include incentive provisions in some construction contracts.”¹⁰³ The department also “follows more of a ‘method based’ form of construction contracting” because its contracts include “provisions that determine the method of construction.”¹⁰⁴

B. Whether Standards Are Required

A threshold question is whether a high-performance contract having an incentive or liquidated-damages clause must include specified standards or criteria or simply may designate a third party to make a determination, for example, whether a project has been timely completed or otherwise in accordance with the contract. Unless the inclusion of performance standards are otherwise required by law, there is some authority that standards are not required.

The court’s opinion in *McCarthy Brothers Construction Co. v. Pierce*¹⁰⁵ offers some guidance on performance determinations and whether a contract must include or refer to guidelines for deciding whether a contractor has complied with a contract. First, the court

ITY IN THE PUBLIC SECTOR 2 (IOS Press 2005).

⁹⁸ *Id.* at 1.

⁹⁹ ROBERT FRANK CUSHMAN & JAMES J. MEYERS, CONSTRUCTION LAW HANDBOOK 207 (Aspen Pub. 1999) (hereinafter cited as “Construction Law Handbook”).

¹⁰⁰ 188 Ct. Cl. 684, 412 F.2d 1360 (1969).

¹⁰¹ *Id.* at 688, 412 F.2d at 1362.

¹⁰² CONSTRUCTION LAW HANDBOOK, *supra* note 99, at 496.

¹⁰³ Survey response of CTDOT.

¹⁰⁴ *Id.*

¹⁰⁵ 832 F.2d 463 (8th Cir. 1987).

stated that under Missouri law the parties to a contract “may agree that a designated third party shall determine questions relating to the performance of a contract, [however] those determinations are only binding as long as the decisions of the third party are not in bad faith, the product of a gross mistake, or arbitrary or capricious,” allegations that McCarthy did not make.¹⁰⁶

Second, “[t]he fact that the third party’s decision reflects an error in judgment or that a court may ultimately reach a different conclusion does not establish bad faith.”¹⁰⁷ The court held that there was no evidence of bad faith, a gross mistake, or arbitrariness or capriciousness.¹⁰⁸ The court rejected McCarthy’s argument that the Department of Housing and Urban Development’s (HUD) representative’s determination regarding lack of substantial completion was one “without any guidelines and totally at his own whim and complete discretion,” and that the date of substantial completion should be the date that the architect certified that the contract was substantially complete.¹⁰⁹

C. Performance Standards Used by Transit Agencies

Transit agencies were asked about the types of provisions they use in their performance-based contracts. Twenty-three of 27 agencies reported that their contracts set forth the contract requirements in terms of the expected results. Fourteen agencies also stated that their contracts describe or specify the manner or methods to be used in performing the contract.

Nineteen agencies reported that their performance-based contracts include measurable and verifiable performance criteria, goals, or standards. As noted, 13 agencies also include performance guarantees in their contracts. Sixteen agencies’ contracts describe how the contractor’s performance will be evaluated pursuant to a quality assurance plan or program.

Twenty-three agencies include a provision in their contracts on how incentive payments and liquidated damages are to be determined or assessed.

¹⁰⁶ *Id.* at 468 (citing *Sunkyong Int’l, Inc. v. Anderson Land & Livestock Co.*, 828 F.2d 1245, 1250 (8th Cir. 1987); *Phoenix Assurance Co. v. Appleton City*, 296 F.2d 787, 790 (8th Cir. 1961); *Fullington v. Ozark Poultry Supply Co.*, 327 Mo. 1167, 39 S.W.2d 780, 782–83 (1931); *Twin River Constr. Co. v. Pub. Water Dist. No. 6*, 653 S.W.2d 682, 693 (Mo. Ct. App. 1983); *Juengel Constr. Co. v. Mt. Etna, Inc.*, 622 S.W.2d 510, 514 (Mo. Ct. App. 1981); *Massman Constr. Co. v. Lake Lotawana Ass’n*, 240 Mo. App. 469, 210 S.W.2d 398, 402 (1948)).

¹⁰⁷ *Id.*

¹⁰⁸ *Id.* at 469.

¹⁰⁹ *Id.* at 468 n.8.

Table 4. Types of Performance-Based Provisions in Transit Agency Contracts.

| Description of Contractual Provision | No. of Agencies Including in Their Contracts |
|---|---|
| Requirements stated in terms of expected results | 23 (85%) |
| Requirements stated in terms of manner or methods to be used | 14 (52%) |
| Measurable and verifiable performance criteria, goals, or standards | 19 (70%) |
| Performance guarantees | 13 (48%) |
| Provisions for evaluating a contractor's performance | 16 (60%) |
| Provisions determining the amount of incentive payments or liquidated damages | 23 (85%) |

Some agencies use both incentive and liquidated-damages provisions in their contracts. Although not necessarily relating to transit operations, the Connecticut DOT provided a copy of its incentive and liquidated-damages provisions for construction along Interstate 95 with incentive and liquidated-damages tables.¹¹⁰ The department also provided a copy of its contract-time and liquidated-damages provisions with tables specifying liquidated damages per hour.¹¹¹

Other provisions provided by transit agencies with respect to a variety of contracts include clauses applicable to

- Liquidated damages and early completion incentives.¹¹²
- Incentive payments for early completion of bridge replacement work and associated liquidated damages.¹¹³
- Performance bonuses and penalties for completed trips.¹¹⁴

D. Use of Surveillance

As stated, the GAO report discussed previously recommends a quality assurance phase providing for surveillance with clearly stated methods to be used to monitor performance. Transit agencies reported on whether in managing their performance-based con-

tracts they use any form of surveillance to monitor the performance of contractors. Fifteen agencies said that they did and provided details on the form of surveillance and their use of it.¹¹⁵ The same methods, of course, may be applicable to contracts without incentive-payment or liquidated-damages clauses.

COTPA in Oklahoma stated that its department head acts as the project manager; that the architect and engineer oversee a project to assure that it satisfies the specifications, and that a professional engineer from the city's public works department is also a project manager to keep the prime contractor on time and see that the finished project meets the specifications and the scope of the work. There are weekly meetings with updates and follow-up on the previous meetings.¹¹⁶ The Utah Transit Authority performs "quality assessment and monthly on-site review of progress with respect to invoices" and uses an incentive program that rates performance on the basis of "quality, safety, cost, schedule, change orders, and stakeholder relations."¹¹⁷

The NYCT reports that it

employs an extensive construction management team and maintains field offices at all job sites. Full-time resident engineers are assigned to each worksite and monitor all work activities. For procurements of rolling stock, NYCT employs inspectors to witness all phases of manu-

¹¹⁰ CTDOT, App. 3, at A3-61–A3-65.

¹¹¹ *Id.*

¹¹² SANDAG, App. 3, at A3-88–A3-92, § 8-1.07.

¹¹³ San Mateo County Transit Dist., App. 3, at A3-108–A3-113 (Incentives, § 01003).

¹¹⁴ San Diego MTS, App. 3, at A3-93–A3-98, §§ 14 and 15.

¹¹⁵ Survey responses of Capital MTA, COTPA, CTDOT, DART-Dallas, Fort Worth Trans. Auth., Greater N.H. Transit Dist., MBTA, MTA Metro-North, San Diego MTS, San Joaquin RTD, San Mateo County Transit Dist., SEPTA, TriMet, and Utah Transit Auth.

¹¹⁶ Survey response of COTPA.

¹¹⁷ Survey response of Utah Transit Auth.

facture. [The] NYCT Access A Ride (Paratransit) management team monitors contract performance for adherence to contractual requirements and standards through periodic surveys and submission of reports from contractors. In addition, the team reviews trends in complaints for each contractor. The monitoring of the performance of the Paratransit call centers is conducted through a software application that provides real-time and historical comparison of actual performance by [the] agent and by [the] unit to the required contractual standards of performance.¹¹⁸

Other transit agencies' methods of surveillance include a full-time inspector during the entire performance period of a construction or other contract;¹¹⁹ inspection and oversight by the department's construction office;¹²⁰ visits by the project manager to the site daily, the inclusion of performance reports with monthly invoices, and verification by the project manager of the accuracy of any report;¹²¹ monitoring through on-site inspections by field personnel to assure compliance with a contract's scheduling requirements;¹²² contracting with third-party vendors for inspection of large construction jobs and the use of an All-Agency Contractor Evaluation (ACE) and a quality assurance program;¹²³ for service contracts, reliance on management, "ghost rider monitoring," and video cameras on buses and at transit centers;¹²⁴ the use of cameras to film progress on bridge replacement and the comparison by agency personnel of performance at the construction site with the contract's schedule;¹²⁵ review by program and contract managers of the schedule, product, and design; and the use of "pilot testing" and "on-site, off-site inspections."¹²⁶

V. TRANSIT AGENCY EXPERIENCE IN USING INCENTIVE PAYMENT AND LIQUIDATED-DAMAGES CLAUSES

A. Best Practices in the Use of Incentive Clauses

A TRB Synthesis states that "recent developments in establishing the construction time of contracts have proven effective in reducing the contract specified duration and in further reducing the achieved construction duration. These techniques are called the A plus B

method and the incentive/disincentive method of bidding contract time."¹²⁷

As explained in the Synthesis, the A represents the contractor's bid price; the contractor's time estimate for the contract is part of the bid that is multiplied by the daily cost rate, arriving at the B portion of the bid.¹²⁸ "The number of days bid by the contractor then becomes the contract completion date against which performance is measured."¹²⁹

Although the A + B method can be used to calculate liquidated damages for failure to complete the contract within the B days bid (plus any agreed extensions), "[a]n I/D [incentive/disincentive] modification of this practice has been used more extensively."¹³⁰

An incentive/disincentive contract would be bid similar to an A + B but would add the proviso that the contractor is entitled to receive an incentive bonus payment each day that it finishes earlier than the bid time. The disincentive part of the clause is that the contractor would be subject to deduction from its contract earnings of a similar value for each day it finishes after the latest acceptable contract completion date. When using the incentive/disincentive bid process, many owners specify the maximum time that will be allowed under any circumstances, but set the calculation of the incentive/disincentive from the number of days that the contractor bid.¹³¹

The Synthesis concluded that "[t]he use of I/D scheduling seems to present a significant opportunity to drastically reduce the construction time estimated by project engineers...."¹³²

According to the *Best Practices Procurement Manual*,¹³³ "[t]ransit agencies have had success in reducing project completion times by using a technique wherein bids are solicited and evaluated in terms of the prices offered and the best achievable completion schedule."¹³⁴ However, the Manual suggests that the use of incentives and liquidated damages "is important to keep the bidders 'honest' in their proposed completion schedules. The use of bonuses will provide an even stronger incentive for the bidders to successfully make their proposed schedules after contract award."¹³⁵

The Manual includes some guidance on the use of incentives. For example, the price-plus-schedule bidding technique of contracting "is likely to encourage efficient contractors to bid, and it offers the likelihood of shorter construction project durations because of the

¹¹⁸ Survey response of NYCT.

¹¹⁹ Survey response of Capital MTA (providing a checklist for the construction of one project).

¹²⁰ Survey response of CTDOT.

¹²¹ Survey responses of Fort Worth Trans. Auth. and San Joaquin RTD (visits by the project manager to the site and review and monitoring of payment inquiries and a calendar of "due or expiring events").

¹²² Survey response of MBTA (providing a copy of its standard schedule specifications § 01321 for details).

¹²³ Survey response of MTA Metro-North.

¹²⁴ Survey response of San Diego MTS.

¹²⁵ Survey response of San Mateo County Transit Dist.

¹²⁶ Survey response of SEPTA.

¹²⁷ CALLAHAN, *supra* note 19, at 1.

¹²⁸ *Id.* at 13.

¹²⁹ *Id.*

¹³⁰ *Id.* at 13–14.

¹³¹ *Id.*

¹³² *Id.* at 14.

¹³³ FED. TRANSIT ADMIN., BEST PRACTICES PROCUREMENT MANUAL, available at http://www.fta.dot.gov/grants/13054_6037.html.

¹³⁴ *Id.* § 6.1.9.

¹³⁵ *Id.*

strong financial incentives for achieving the best completion schedule.¹³⁶

However, with such a technique,

[I]t is extremely important that the construction contractor have control over the work site, and that the Agency's responsibilities at the work site be minimal or, preferably, nonexistent. If the contractor is dependent upon the Agency to furnish support at the work site, or if the contractor's work is dependent upon the activities of other contractors, the Agency can expect claims regarding the issue of delays, which in turn affect the incentive provisions of the construction contract. In view of the probabilities of claims and litigation, Agencies should avoid incentive contracts such as this unless they can turn a work site over to a construction contractor and allow the contractor to control that site and the scheduling of all work required to complete the project. Where contractors lack the necessary control over the work site, Agencies may well have to pay higher prices, based on the contract bonuses and the contractor's successful claims for delays, and still have a project that is late in completion.¹³⁷

Although the agencies provided copies of clauses with specified amounts of incentive payments or liquidated damages, no agency indicated how it arrives at a specific hourly or daily rate. Nevertheless, the agencies did not report any litigation involving the specific amounts chosen for incentive payments or liquidated damages that were accepted by contractors in contracts applicable to construction projects or procurements of capital equipment or services.

B. Incentive Payments Made by Transit Agencies

In response to the survey, transit agencies reported on what they had paid in incentive awards or bonuses to a contractor for early or on-time completion for the most recent 3-year period (Table 5). Fourteen agencies using performance-based contracting had not made any incentive payments. Four agencies reported paying incentives amounting to \$25,000,¹³⁸ \$28,000,¹³⁹ \$40,000,¹⁴⁰ and \$132,000.¹⁴¹ One agency, however, reported paying \$2,500,000.¹⁴² Six agencies did not respond or stated that the information was not available. For example, the NYCT stated that it does not maintain a central database of incentive awards or

bonuses paid to contractors for early or on-time completion.¹⁴³

¹³⁶ *Id.*

¹³⁷ *Id.*

¹³⁸ Survey response of MTA Metro-North (in connection with the completion of repairs to the West Hudson Line after Hurricane Irene).

¹³⁹ Survey response of Orange County Transp. Auth. (reporting \$10,000 for passenger productivity incentive and \$18,000 for on-time performance).

¹⁴⁰ Survey response of Utah Transit Auth. (figure applicable to 2010).

¹⁴¹ Survey response of Capital MTA (stating that incentive payments for the 3-year period averaged \$44,000 per year).

¹⁴² Survey response of Utah Transit Auth.

¹⁴³ Survey response of NYCT.

Table 5. Incentive Payments Made by Transit Agencies for the Most Recent 3-Year Period.

| Amount of Incentive Payments | No. of Agencies |
|--|------------------------|
| \$0 | 14 (58%) |
| \$25,000 to \$30,000 | 2 (8%) |
| \$40,000 | 1 (3%) |
| \$132,000 | 1 (3%) |
| \$2,500,000 | 1 (3%) |
| Information not available or no response | 8 (30%) |

C. Examples of Incentive Payment Clauses Used by Transit Agencies

The Connecticut DOT's incentive payment and liquidated-damages clause establishes an "allowable completion date" and an "incentive completion date." If the contractor completes the specified work prior to the first date, the contractor receives a lump-sum incentive payment in the maximum amount. If the work is completed after the allowable-completion date but before the incentive-completion date, there is a lump-sum incentive payment less liquidated damages as calculated pursuant to a formula in the clause. If the contractor completes the work after the allowable-completion date, there is no incentive payment and liquidated damages are assessed for each day after the allowable completion date. Any incentive payment will not exceed \$5,000,000, but liquidated damages that may be assessed are unlimited. Presumably, the unlimited range of liquidated damages has not precluded contractors from securing any necessary bonds or insurance as discussed in Section IV.B of the digest.

The department's incentive payment and liquidated-damages clause provides:

Time will be of the essence in completing the stage construction for this project and in opening the new bridges, additional travel lanes and shoulders along I-95. In order to reduce the hazard, cost and inconvenience to the traveling public; the pollution of the environment; and the detriments to local businesses..., the following plan has been established and made a part of the Contract.

The "Allowable Completion Date(s)" are the earliest possible dates that the Department desires to complete the specified Contract Construction Stage elements. The "Incentive Completion Date(s)" are the latest dates that the Contractor will receive incentive payments from the Department to complete the specified Contract Construction Stage elements. Completion prior to the "Allowable Completion Date(s)" will result in a Lump Sum Incentive Payment equal to the Maximum Incentive Payment Amount.

Should the Contractor complete the specified Contract Construction Stage elements after the "Allowable Completion Date(s)" and on or before the "Incentive Completion Date(s)" the total payment shall be Lump Sum In-

centive Payment less Total Liquidated Damages as defined below.

Lump Sum Incentive Payment = Incentive Bonus Payment Amount + (Incentive Daily Payment Amount x (number of days the Contract Construction Stage elements complete before the "Incentive Completion Date"))

Total Liquidated Damages = Liquidated Damages Daily Amount x (number of days the Contract Construction Stage elements complete after the "Allowable Completion Date")

Total Payment = Lump Sum Incentive Payment – Total Liquidated Damages

Should the Contractor fail to complete the specified Contract Construction Stage elements by the "Incentive Completion Date(s)" no Incentive Bonus Payment will be made and Liquidated Damages will be assessed for each day that the specified Contract Construction Stage elements complete after the "Allowable Completion Date(s)".

Total Liquidated Damages = Liquidated Damages Daily Amount x (number of days the Contract Construction Stage elements complete after the "Allowable Completion Date").

The Contractor shall complete all Contract stage construction work which would impede the corresponding traffic shift and be prepared to open the subject travel ways to traffic at their required widths, with travel lanes and shoulders before the corresponding dates and times, and total combined incentive payment(s) made by the Department to the Contractor under this Contract, if any are due, shall not exceed \$5,000,000 for the Project. The total amount of liquidated damages that may be assessed and taken by the Department under this Contract shall not be limited.¹⁴⁴

The department's contract also includes incentive and liquidated damages tables in connection with the foregoing.¹⁴⁵

SANDAG's contracts may include a provision allowing for early-completion incentives and a table for calculating the amounts. It should be noted that the clause provides that if the contractor accelerates the

¹⁴⁴ CTDOT, App. 3, at A3-61–A3-65.

¹⁴⁵ See *id.*

work to meet a milestone established by the contract, any additional costs incurred in doing so are for the contractor’s account, not for the agency’s account.¹⁴⁶

If the Engineer determines that all work included in a Milestone described in Section 5-1.05, “Order of Work,” is completed before the time provided for in Section 8-1.06, “Time of Completion,” less the time specified in the table below, the Contractor is entitled to an Early Completion Incentive in the amount as specified in the table below.

| Milestone | Time Incentive | Amount |
|-----------|----------------------|-------------|
| A | less 7 working days | \$20,000.00 |
| B | less 14 working days | \$30,000.00 |
| C | less 21 working days | \$40,000.00 |
| D | less 28 working days | \$50,000.00 |
| E | less 35 working days | \$60,000.00 |

The early completion incentive time period is defined as the number of working days specified to complete the Milestone in Section 8-1.06, “Time of Completion,” less the time specified in the table above.

Should the Contractor choose to accelerate its work to complete the Work specified in each Milestone by the early completion incentive time period, then any additional labor, material, equipment, supervision, and overhead cost for acceleration of this work shall be performed at the Contractor’s expense regardless of whether the Early Completion Incentive is achieved.

If the Contractor elects to accept the Early Completion Incentive, then the Contractor agrees to waive all claims for the Work activities performed within that milestone as specified in Section 5-1.18, “Maintaining Rail Traffic,” on page 5-41, in the “Table–ORDER OF WORK.”

Contractor must request each incentive amount within 15 working days following completion of the work contained in the Milestone. The Contractor shall submit a signed, written notice to the Engineer that the Contractor has completed the work within the early completion incentive time period. The notice shall state that the Contractor is waiving any and all:

(a) Notice of Potential Claims as described in Section 9-1.04, “Notice of Potential Claim,” for all contract work activities occurring during the entire early completion incentive time period;

(b) resulting claims during the entire early completion incentive time period, and

(c) any and all other disputes and claims arising during the entire early completion incentive time period between SANDAG and the Contractor arising under and by virtue of the contract.

The Early Completion Incentive shall not be paid by the Engineer if the written request does not conform to all requirements set forth in this section.¹⁴⁷

Other transit agencies provided copies of their performance-based contracting standards and conditions, including the following:

- A quality assurance program and related contractual provisions.¹⁴⁸
- Specific liquidated damages with performance measures all paid on a monthly basis.¹⁴⁹
- A contractor performance evaluation rating.¹⁵⁰
- A contract modification with key performance indicators regarding quality of service, including on-board times and on-time performance and efficiency of service.¹⁵¹
- A liquidated-damages clause and a checklist in connection with providing transit services.¹⁵²
- Performance matrices for contracted route service,¹⁵³ paratransit services,¹⁵⁴ and university shuttle services.¹⁵⁵
- A performance matrix for maintaining schedule/run assignments and operator information; bidding-operator assignment selection; vehicle assignment and scheduling; operator availability and scheduled assignment changes; operator check-in; service dispatching and completion; operator communications; general process control, reporting, security, and performance; and interface requirements.¹⁵⁶
- Performance bonuses and penalties (e.g., a completed trips incentive bonus or penalty).¹⁵⁷

¹⁴⁷ *Id.*

¹⁴⁸ MBTA, App. 3, at A3-73–A3-76.

¹⁴⁹ San Diego MTS, App. 3, at A3-93–A3-98; *see also* San Joaquin RTD, App. 3, at A3-100–A3-107, § 3.4 (service performance standards and incentives).

¹⁵⁰ CTDOT, App. 3, at A3-60.

¹⁵¹ COTA, App. 3, at A3-11–A3-12.

¹⁵² LYNX, App. 3, at A3-13–A3-14.

¹⁵³ Capital MTA, App. 3, at A3-1–A3-2.

¹⁵⁴ *Id.* at A3-3–A3-5.

¹⁵⁵ *Id.* at A3-8–A3-10.

¹⁵⁶ LYNX, App. 3, at A3-16–A3-44.

¹⁵⁷ San Diego MTS, App. 3, at A3-93–A3-98.

¹⁴⁶ SANDAG, App. 3, at A3-88–A3-92.

D. Best Practices in the Use of Liquidated-Damages Clauses

1. Legal Requirements for an Enforceable Liquidated-Damages Clause

The parties may stipulate to the measure of damages for breach of a contract, including a public construction contract.¹⁵⁸ Of course, a construction contract may incorporate both an incentive clause and a disincentive or liquidated-damages clause. As a federal court stated in *Mega Construction Co., Inc. v. United States*,¹⁵⁹ a liquidated-damages clause is particularly “useful...when damages are uncertain in nature or amount or are unmeasurable, as in the case in many government contracts.” (internal quotation marks omitted). Indeed, the federal government and all the states have statutes and regulations applicable to the use of liquidated damages in public construction and other contracts.¹⁶⁰

In general, although state statutes and regulations, as well as judicial precedents, should be consulted, a liquidated-damages clause must be a reasonable forecast of the damages caused by a breach of the contract.¹⁶¹ The enforcement of a liquidated-damages clause is a question of law determined by the court.¹⁶² The burden of establishing whether a liquidated-damages clause is enforceable is on the party seeking to invalidate the provision.¹⁶³

In the absence of a statute, the courts typically determine the validity of a liquidated-damages clause based on the interpretation in that jurisdiction of the rule set forth in the *Restatement of the Law Second, Contracts 2d*.¹⁶⁴ As the *Restatement* provides, “[d]amages for breach by either party may be liquidated in the agreement, but only at an amount that is reasonable in the light of the anticipated or actual loss caused by the breach and the difficulties of proof of loss.”¹⁶⁵ First, the amount of liquidated damages must

be reasonable in that the sum must “approximate[] the actual loss that has resulted from the particular breach, even though it may not approximate the loss that might have been anticipated under other possible breaches.”¹⁶⁶ Second, the more difficult it is to prove that a loss has occurred or to establish the amount of the loss “with the requisite certainty..., the easier it is to show that the amount fixed is reasonable.”¹⁶⁷

There are various judicial formulations of the requirements for a valid liquidated-damages clause. To uphold a liquidated-damages clause in Georgia, the injury caused by the breach must be difficult or impossible of accurate estimation; the parties must have intended to provide for damages rather than for a penalty; and the sum stipulated must be a reasonable preestimate of the probable loss.¹⁶⁸ In Kansas, the courts

distinguish unenforceable penalties from enforceable liquidated damages using “two considerations”: first, whether the amount is “conscionable,” that is, whether it is “reasonable in view of the value of the subject matter of the contract and of the probable or presumptive loss in case of breach”; second, whether the “nature of the transaction is such that the amount of actual damage resulting from default would not be easily and readily determinable”...Kansas law echoes traditional common-law principles in this respect.¹⁶⁹

(citations omitted).

In Missouri,

[l]iquidated damages are a measure of compensation that, at the time of contracting, the parties agree will represent damages for breach. ...Under Missouri law, liquidated damages provisions are generally enforceable. ...The requirements for a liquidated damages provision to validly fix damages are (1) that the harm is of a kind difficult to accurately measure and (2) that the amount fixed as damages is a reasonable forecast of the harm caused by a breach.¹⁷⁰

(citations omitted).

Thus, for a liquidated-damages clause to be upheld, the parties must have intended that the specified liquidated damages are a reasonable forecast of damages, which at the time of contracting were incapable of being estimated or were very difficult to estimate. Otherwise, a court may determine that the clause in question is an unenforceable penalty, thereby leaving the party seeking damages for breach to have to prove the actual damages caused by the breach.

In a case involving a public contract for the construction of a power and fiber-optic line for a city, a

large liquidated damages is unenforceable on grounds of public policy as a penalty.”

¹⁵⁸ *Id.* § 356, cmt. b.

¹⁵⁹ *Id.*

¹⁶⁰ *Fuqua Constr. Co.*, 293 Ga. App. at 463, 667 S.E.2d at 635.

¹⁶¹ *Hutton Contracting Co., Inc. v. City of Coffeyville*, 487 F.3d 772, 781 (10th Cir. 2007).

¹⁶² *Monsanto Co. v. Swann*, 308 F. Supp. 2d at 944.

¹⁵⁸ *Monsanto Co. v. Swann*, 308 F. Supp. 2d 937, 944 (E.D. Mo. 2003).

¹⁵⁹ 29 Fed. Cl. 396, 503 (1993) (citation omitted).

¹⁶⁰ Scott M. Tyler, *No (Easy) Way Out: “Liquidating” Stipulated Damages for Contractor Delay in Public Construction Contracts*, 44 DUKE L.J. 357, 374 (1994).

¹⁶¹ *Fuqua Constr. Co. v. Pillar Dev., Inc.*, 293 Ga. App. 462, 463, 667 S.E.2d 633, 635 (2008); *Paragon Group, Inc. v. Ampleman*, 878 S.W.2d 878, 881 (Mo. App. 1994).

¹⁶² *Loomis v. Lange Financial Corp.*, 109 Nev. 1121, 1125–26, 865 P.2d 1161, 1163 (1993).

¹⁶³ *Seven Seventeen HB Charlotte Corp. v. Shrine Bowl of Carolinas, Inc.*, 182 N.C. App. 128, 641 S.E.2d 711, 714 (2007); *Harmony v. Sawyer*, 98 Nev. 544, 547, 654 P.2d 1022, 1023 (1982).

¹⁶⁴ Tyler, *supra* note 160, at 374–75 (citing James A. Weisfield, Note, “Keep the Change!”: A Critique of the No Actual Injury Defense to Liquidated Damages, 65 WASH. L. REV. 977, 980 (1990)).

¹⁶⁵ *Restatement (Second) of Contracts 2d*, § 356(1). Moreover, the *Restatement* states, “[a] term fixing unreasonably

federal court in Kansas held that the liquidated-damages clause was reasonable because the district court's award of liquidated damages approximated the increased administration and engineering costs to the city caused by the delay.¹⁷¹

In a Pennsylvania case, involving a prime contractor on a renovation project for the State's higher education system, the court affirmed a Board of Claims' determination that the experienced contractor had agreed to a liquidated-damages clause in a project in which delay was a risk and damages were difficult to prove. The court held that the Board properly assessed liquidated damages based on the period of delay, reduced by the number of days of delay that were beyond the contractor's control or that were due to the acts or omissions of the public entity.¹⁷² In contrast, in another Pennsylvania case, the court held that the contractor carried its burden of proving that the full liquidated-damages award allowed by the contract would have been unreasonable and in the nature of a penalty under the circumstances of that case.¹⁷³

One source argues that "[a] majority of jurisdictions consider whether an amount stipulated as liquidated damages bears a reasonable relation to the damages that reasonably might be expected to result from a breach."¹⁷⁴ (footnote omitted). However, in at least some states, the courts have held that in contracts for public projects a liquidated-damages clause will be enforced without proof that the public entity suffered any actual damages. As a Missouri court has held:

Although we believe the liquidated damages clause was properly invoked under the Restatement standard, there is another reason we believe the assessment of liquidated damages by the Commission against Penzel was correct. The case before us involves a public works project, not a private owner. The southern district in *Sides Construction Co. v. City of Scott City*, 581 S.W.2d 443 (Mo. App. 1979), a case involving a contract to build a swimming pool, bathhouse, and related items in a city park, expressed its view that, in a public works project, the public entity may recover liquidated damages solely upon proof of a violation of the contract.¹⁷⁵

¹⁷¹ *Hutton Contracting Co.*, 487 F.3d at 781 (applying Kansas law).

¹⁷² *A.G. Cullen Constr., Inc. v. State Sys. of Higher Educ.*, 898 A.2d 1145, 1162 (Pa. 2006).

¹⁷³ *Wayne Knorr, Inc. v. Dep't of Transp.*, 973 A.2d 1061, 1091 (Pa. 2009).

¹⁷⁴ *Tyler*, 44 DUKE L.J. 357, 377.

¹⁷⁵ *Taos Constr. Co., Inc. v. Penzel Constr. Co., Inc.* 750 S.W.2d 522, 526 (Mo. App. 1988) (also acknowledging other state court opinions in *Melwood Constr. Corp. v. State*, 126 Misc. 2d 156, 481 N.Y.S.2d 289, 292-93 (1984), *aff'd* 119 A.D. 2d 734, 132 Misc. 2d 338, 501 N.Y.S.2d 604 (1986); *Dave Gustafson & Co. v. State*, 83 S.D. 160, 156 N.W.2d 185, 188-89 (1968), as well as federal court decisions in *United States v. Bethlehem Steel Co.*, 205 U.S. 105, 119, 27 S. Ct. 450, 455, 51 L. Ed. 731, 737 (1907); *Bethlehem Steel Corp.*, 234 F. Supp. at 729-32; and *Sw. Eng'g Co. v. United States*, 341 F.2d 998, 1001-02 (8th Cir. 1965)).

As another source observes, some courts have held that in cases involving a public construction contract, "no actual damages, at all, need have been sustained in order to collect liquidated damages."¹⁷⁶

Finally, as also advised by the FTA, a liquidated-damages clause may be used when a recipient "reasonably expects to suffer damages through delayed contract completion" and it "would be difficult or impossible to determine" the amount of damages.¹⁷⁷

2. Guidelines for Determining the Amount of Liquidated Damages

As stated, the federal government and the states have statutes and regulations regarding the use of liquidated-damages clauses in public construction contracts.¹⁷⁸ (Footnote omitted.) Moreover, "[s]ome government agencies have their own internal guidelines for establishing liquidated damages rates."¹⁷⁹ (Emphasis supplied.) Some of the statutes and regulations require that government projects include a liquidated-damages clause.¹⁸⁰ The statutes or regulations may include or require standards for determining the amount of liquidated damages to be assessed. It should be remembered that "[l]iquidated damages rates consistent with such guidelines are presumed to be reason-

¹⁷⁶ Matthew J. Christian, *Public Entities in Nevada Beware: The Liquidated Damages Clause in Your Construction Contract May Be Unenforceable*, 12 NEV. LAWYER 16 at *19 and n.1 (Oct. 2004) (citing, e.g., *Thompson v. St. Charles County*, 126 S.W. 1044, 1050 (Mo. 1910) and *Solomon v. Dep't of State Highways & Transp.*, 345 N.W.2d 717, 720 (Mich. Ct. App. 1984)).

¹⁷⁷ FTA Circular 4220.1F, *supra* note 21, at IV-12.

¹⁷⁸ *Tyler*, 44 DUKE L.J. 357, 374.

¹⁷⁹ SMITH, CURRIE & HANCOCK, *supra* note 21, at 432.

¹⁸⁰ In *Tyler*, 44 DUKE L.J. 375, n.85, the author cites to and quotes from a number of illustrative statutes and regulations on this point, including: ALASKA STAT. § 36.30.430(b)(1) (1992) ("[I]n state contracts, t]he commissioner shall adopt regulations permitting or requiring the inclusion...of clauses providing for...liquidated damages."); LA. REV. STAT. ANN. § 39:1661(B)(1) (West 1989) ("Regulations may permit or require the inclusion in state contracts of clauses providing for...liquidated damages as appropriate."); MD. CODE ANN. STATE FIN. & PROC. § 13-218(a)(4) (Supp. 1993) ("[State procurement contracts] shall include clauses covering...liquidated damages, as appropriate"); OHIO REV. CODE ANN. § 731.15 (Baldwin 1992) ("When a bonus is offered for completion of a contract prior to a specified date, [a village] may exact a prorated penalty in like sum for each day of delay beyond the specified date."); OKLA. STAT. ANN. tit. 15, §§ 214-215 (West 1993) ("A stipulation...providing for the payment of an amount which shall be presumed to be an amount of damage sustained by a breach of such contract, shall be held valid, when, from the nature of the case, it would be impracticable or extremely difficult to fix the actual damage."); 48 C.F.R. § 12.202 (1993) (Acquisition regulation permitting liquidated damages only "when...the Government may reasonably expect to suffer damage if...performance is delinquent, and...the extent...of such damage would be difficult or impossible to ascertain or prove").

able measures of the foreseeable actual damages that the government will sustain due to late completion of the project.”¹⁸¹

A Florida statute provides:

Every contract let by the department for the performance of work shall contain a provision for payment to the department by the contractor of liquidated damages due to failure of the contractor to complete the contract work within the time stipulated in the contract or within such additional time as may have been granted by the department. The contractual provision shall include a reasonable estimate of the damages that would be incurred by the department as a result of such failure. *The department shall establish a schedule of daily liquidated damage charges, based on original contract amounts, for construction contracts entered into by the department, which schedule shall be incorporated by reference into the contract.*¹⁸²

(Emphasis supplied.)

The same Florida statute also provides:

The department shall update the schedule of liquidated damages at least once every 2 years, but no more often than once a year. *The schedule shall, at a minimum, be based on the average construction, engineering, and inspection costs experienced by the department on contracts over the 2 preceding fiscal years. The schedule shall also include anticipated costs of project-related delays and inconveniences to the department and traveling public. Anticipated costs may include, but are not limited to, road user costs, a portion of the projected revenues that will be lost due to failure to timely open a project to revenue-producing traffic, costs resulting from retaining detours for an extended time, and other similar costs.* Any such liquidated damages paid to the department shall be deposited to the credit of the fund from which payment for the work contracted was authorized.¹⁸³

(Emphasis added.)

In an Illinois case, the court explained that the defendant arrived at its \$200 per-diem amount for liquidated damages based in part on the Illinois DOT’s Standard Specifications, which suggested that liquidated damages be set at \$200 per day on a \$1 million to \$2 million project.¹⁸⁴

Using the FAR as a guide and depending on the contract, “liquidated damages may be assessed for delays in completing phases of the contract and for delays

in substantial completion of the entire project.”¹⁸⁵ FAR Section 11.501 sets forth the basic factors and guidelines that should be considered when determining whether to use a liquidated-damages clause, as well as in establishing the rate for the damages.¹⁸⁶

The FTA Circular advises that the rate and measurement standards must be specified in the solicitation and contract, must be “calculated to reasonably reflect the recipient’s costs should the standards not be met,” and must be “established at a specific rate per day for each day beyond the contract’s delivery date or performance period.”¹⁸⁷ The file should record “the calculation and rationale” for the damages assessed.¹⁸⁸ If the government is the cause of the delay, “liquidated damages are either waived or apportioned between the government and the contractor.”¹⁸⁹ Any such damages that are recovered must be credited to the grant, thus becoming available to the agency for activities that are within the scope of the grant.¹⁹⁰

3. Guidelines for Drafting a Liquidated-Damages Clause

There are some suggested guidelines to follow or language to include when drafting a liquidated-damages clause, such as:

- The parties should express their intent in the agreement that the liquidated-damages clause is in fact meant to be a liquidated-damages clause and not a penalty.
- The liquidated-damages clause is a reasonable forecast of the damages in the event of a breach of the contract.
- At the time of entering into the contract, the parties stipulate that the damages in the event of a breach of contract are incapable of being estimated or are very difficult to estimate.
- The contract should identify the type or types of breach of contract to which the liquidated-damages clause applies to assist in avoiding a ruling later that the clause is overbroad or punitive.
- The parties also may specify the types of damages that are difficult to estimate, such as when damages are incurred because of a delay in the completion of the contract.
- It has been recommended that the contract include a formula for calculating the liquidated damages that are applicable to a specific breach, such as a per-diem sum for each day of delay that is attributable to the fault of the contractor.¹⁹¹ It may be noted that an

¹⁸¹ SMITH, CURRIE & HANCOCK, *supra* note 21, at 432.

¹⁸² FLA. STAT. § 337.18(2). Although the section does not mention transit specifically, the Public Transportation chapter defines a “transportation facility” to be “any means for the transportation of people or property from place to place which is constructed, operated, or maintained in whole or in part from public funds.” *Id.* § 340.03(30).

¹⁸³ *Id.* § 337.18(2).

¹⁸⁴ *Stone v. Arcola*, 181 Ill. App. 3d 513, 522, 536 N.E.2d 1329, 1335 (1989). Although the liquidated-damages clause was held to be “appropriate and enforceable,” the court ruled in favor of the contractor on other grounds. *Id.*, 181 Ill. App. 3d at 525, 536 N.E.2d at 1337.

¹⁸⁵ SMITH, CURRIE & HANCOCK, *supra* note 21, at 432.

¹⁸⁶ *Id.*

¹⁸⁷ FTA Circular 4220.1F, *supra* note 24, at IV-12.

¹⁸⁸ *Id.*

¹⁸⁹ CONSTRUCTION LAW HANDBOOK, *supra* note 99, at 355 (citing *George Sollitt Constr. Co. v. United States*, 64 Fed. Cl. 229, 243 (2005)).

¹⁹⁰ *Id.* See also FTA, Incentive Contracts, *supra* note 45.

¹⁹¹ *Public Health Trust of Dade County v. Romart Constr., Inc.*, 577 So. 2d 636, 638 (Fla. Ct. App. 1991) (upholding liq-

American Law Reports annotation collects cases that have upheld liquidated-damages clauses, including those providing for liquidated damages on a per-diem basis.¹⁹²

- The parties may include a stipulation that the liquidated-damages clause is to be applied and enforced against the breaching party without any showing being required that there are any actual damages incurred or suffered at all by the public entity because of the breach and/or without any showing that there is any relationship between the stipulated amount of liquidated damages and the amount of actual damages caused by the breach.¹⁹³

E. Liquidated Damages Collected by Transit Agencies

Transit agencies that are using performance-based contracting were asked to state for the most recent 3-year period how much each agency had collected or had been credited in liquidated damages for delay in contract completion (Table 6). Of 27 agencies using performance-based contracting, 17 reported that no liquidated damages had been collected or credited for the most recent 3-year period. Four agencies reported that they had collected or been credited liquidated damages in the amounts of \$6,800;¹⁹⁴ \$29,950;¹⁹⁵ \$429,000;¹⁹⁶ and \$471,300.¹⁹⁷ One agency, however, reported \$6,000,000 in liquidated damages on one project.¹⁹⁸ Five agencies either stated that the information was not available or did not respond to the inquiry.

liquidated damages of \$2,500 per day even though the county may have suffered no actual monetary loss).

¹⁹² See Annotation, *Contractual Provision for Per Diem Payments for Delay in Performance as One for Liquidated Damages or Penalty*, 12 A.L.R. 4th 891 (2012 Supp.).

¹⁹³ See discussion of the foregoing suggestions in Henry F. Luepke III's *How to Draft and Enforce a Liquidated Damages Clause*, 61 J. OF MO. BAR 324, 326–28 (2005).

¹⁹⁴ Survey response of Orange County Transp. Auth. (stating that the amount was collected on one contract).

¹⁹⁵ Survey response of Omnitrans (reporting that for 1 year (July 1, 2010, to June 30, 2011) it had collected or been credited \$16,000 and that for a partial year (July 1, 2011, to Feb. 29, 2012) it had collected or been credited \$13,550).

¹⁹⁶ Survey response of Capital MTA (reporting an average of \$143,000 per year).

¹⁹⁷ Survey response of CTDOT (reporting \$258,000 for 2009, \$63,200 for 2010, and \$150,100 for 2011).

¹⁹⁸ Survey response of Port Authority/Trans Hudson (PATH).

Table 6. Liquidated Damages Collected by or Credited to Transit Agencies for the Most Recent 3-Year Period.

| Amount of Liquidated Damages | No. of Agencies |
|--|------------------------|
| \$0 | 17 (63%) |
| \$6,500 | 1 (4%) |
| \$29,950 | 1 (4%) |
| \$429,000 to \$471,300 | 2 (7%) |
| \$6,000,000 | 1 (4%) |
| Information not available or agency not responding | 5 (18%) |

F. Examples of Liquidated-Damages Clauses Used by Transit Agencies

The policy of the Central Florida Regional Transportation Authority (LYNX) on liquidated damages includes a definition of liquidated damages, a requirement that estimated damages must be computed on a case-by-case basis, a liquidated-damages checklist to complete, a statement that liquidated damages may be required in any type of contract, and other guidance on the assessment of liquidated damages:

Liquidated damages are a specific sum (or a sum readily determinable) of money stipulated in the contract as the amount to be recovered for each day (or other period as appropriate) of delay in delivery of the product or completion of the contract. They do not represent actual damages but are established in the initial contract as a substitute for actual damages. They should represent, however, the most realistic forecast possible of what the actual damages are likely to be. In order to be enforceable, liquidated damages must be compensatory in nature (a reasonable estimate of actual damages), and not in the nature of a penalty. If the liquidated damages, in effect, provide for a penalty or punishment for breach of contract, rather than compensation for loss sustained by the Agency, the provision will be unenforceable by a court on grounds of public policy.

A Liquidated Damages Checklist must be completed by the Project Manager prior to issuing the solicitation in order to document the Agency's estimate of what actual damages are likely to be for delays in contract completion. The estimated damages must be computed on a case-by-case basis and documented in the contract file.

Liquidated damages may be used in any type of contract: supplies, services and construction when the time of delivery is important and LYNX may reasonably expect to suffer damage if performance is delinquent. When considering whether to use a liquidated damages clause, factors to be considered include the probable effect upon bidders' pricing, potential for discouraging competition, and the costs and difficulties of contract administration. When it is determined that a liquidated damages clause will be included in the contract, the applicable clause and appropriate rate(s) must be contained in the solicitation.

Capping the Liquidated Damages: Open-ended, uncapped liquidated damages may be a serious detriment to competition and may increase the bid prices. Many companies are unable to accept open-ended risks or will simply add contingencies to cover the potential financial impact the damages may cause. If a surety bond is being required for the contract, uncapped liquidated damages may become a detriment to obtaining a bond. The contract, therefore, should include an overall maximum dollar amount or period of time, or both, during which liquidated damages may be assessed.

Substantial Completion: Liquidated damages are not assessed after the date on which the work is substantially completed. Substantial completion is defined as "the time when the construction site or the supplies delivered are capable of being used for their intended purposes." There is no predetermined percentage that will establish substantial completion—the criterion to be used is the availability of the work for its intended use, not a formula as to the percentage of completion.¹⁹⁹

Liquidated-damages clauses used by the San Mateo County Transit District provide for both hourly and daily rates of liquidated damages ranging from \$2,000 per hour for certain delays to \$7,500 per day for delays in obtaining substantial completion of the work.

GP8.4 Liquidated Damages

In case all or any designated portion of the Work called for under the Contract does not achieve Substantial Completion within the time set forth in the Special Provisions, damage will be sustained by the Owner, and the Contractor will pay to the Owner the sum set forth in the Special Provisions for each and every day's delay in achieving Substantial Completion of the Work in excess of the time specified in the Special Provisions. The Owner may deduct the amount of liquidated damages from any monies due or that may become due the Contractor under the Contract.

SECTION 01002

LIQUIDATED DAMAGES PART 1— GENERAL

1.01 DESCRIPTION

¹⁹⁹ LYNX, App. 3, at A3-13–A3-14.

A. Section includes liquidated damages for Substantial Completion and interim milestones.

1.02 LIQUIDATED DAMAGES

A. Attention is directed to General Provisions GP8.4, Liquidated Damages.

B. Liquidated damages in the amount shown per hour shall be assessed for each and every hour delay in finishing the Work of each interim milestone in excess of the specified completion time or date as follows:

1. \$2,000 per hour shall be assessed for each and every hour's delay in completing work performed under a street closure....

C. Liquidated damages in the amount shown per day or as otherwise indicated shall be assessed for each and every day's delay in finishing the Work of each interim milestone in excess of the specified completion time or date as follows:

1. \$5,000 per day shall be assessed for each and every day's delay in completing CP Scott and the temporary station as described in Section 01001.

D. In the event that the Owner directs Contractor to proceed with the work of Option 1, then:

1. Liquidated damages in the amount of \$7,500 per day shall be assessed for each and every day's delay in completing the Work of the Main Contract as described in Section 01001.

E. Liquidated damages in the amount of \$7,500 per day shall be assessed for each and every day's delay in obtaining Substantial Completion of the Work as described in Section 01001.

F. Liquidated damages shall accrue separately for each occurrence listed in Paragraphs 8, C D and E (above).²⁰⁰

Other transit agencies provided copies of their contractual documents and policies regarding the assessment of liquidated damages, including:

- Liquidated-damages clauses and checklists for liquidated damages.²⁰¹
- A contract close-out performance evaluation.²⁰²
- Provisions regarding the preparation/bid tender with daily liquidated damages for each day the project is delayed beyond the mandatory completion date.²⁰³
- A solicitation packet for an invitation to bid for services,²⁰⁴ a best-value bid for services for asbestos

clean-up and removal,²⁰⁵ and the agency's vendor evaluation form.²⁰⁶

- A schedule of deductions based on the value of the contract and the charges per calendar day for failure to complete the work on time.²⁰⁷

- The assessment of liquidated damages in a medical services contract for drug testing.²⁰⁸

- Various other clauses providing for the assessment of liquidated damages.²⁰⁹

G. The Use of Dispute Resolution Boards

According to a TRB Synthesis, some agencies have adopted the use of "a Dispute Review Board (DRB) to hear disputes relatively contemporaneously with construction and to submit nonbinding findings" to settle disputes.²¹⁰ According to the Synthesis,

[t]he DRB was originally conceived to evaluate claims in differing site conditions, particularly in tunnel construction. The process, however, has been so successful that it has rapidly spread to other parts of the transit construction industry and is now being extensively used by several highway departments and is gaining acceptance in commercial applications.²¹¹

Moreover,

[t]he DRB is created as a part of a contracting process and is established by the contract between the owner and the contractor and comes into being at the beginning of the contract. Initially, both the owner and the contractor select their appointed representative to the DRB, who must be acceptable to the other party, and these two nominees then select the third member who acts as chairman.

The DRB members then become familiar with the contract through the review of the contract documents and a tour of the contract site.²¹²

Although some transit agencies may be using DRBs, the agencies responding to the survey did not state or otherwise indicate that they are using DRBs in connection with their performance-based contracts.

²⁰⁰ San Mateo County Transit Dist., App. 3, at A3-114–A3-121.

²⁰¹ See LYNX, App. 3, at A3-13–A3-14 and A3-15 (liquidated damages checklist), and LYNX, App. 3, at A3-13–A3-14 (liquidated damages definition, policy, and guidelines). See also Orange County Transp. Auth., App. 3, at A3-82–A3-87 (deductions for liquidated damages).

²⁰² LYNX, App. 3, at A3-15.

²⁰³ MBTA, App. 3, at A3-73–A3-76.

²⁰⁴ COTPA, App. 3, at A3-51–A3-55.

²⁰⁵ *Id.* at A3-56–A3-57.

²⁰⁶ *Id.* at A3-58–A3-59.

²⁰⁷ MBTA, App. 3, at A3-73–A3-76 (General Conditions § 6.9).

²⁰⁸ Capital MTA, App. 3, at A3-7.

²⁰⁹ See MTA Metro-North, App. 3, at A3-77 (Metro-North's damages in case of delay); San Joaquin RTD, App. 3, at A3-99, § 2.35 (liquidated damages); San Mateo County Transit Dist., App. 3, at A3-114–A3-121, § 01002 (liquidated damages from \$2,000 per hour to \$7,500 per day), and § 26 (liquidated damages); TriMet, App. 3, at A3-122, § 5.2.3 (liquidated damages of \$100,000 after a date certain plus \$10,000 for each calendar day until 10 cars have been conditionally accepted).

²¹⁰ CALLAHAN, *supra* note 19.

²¹¹ *Id.* at 23.

²¹² *Id.*

VI. TRANSIT AGENCIES' EVALUATION OF PERFORMANCE-BASED CONTRACTING

A. Transit Agencies' Success with Incentive Payments and Liquidated-Damages Clauses

Transit agencies in their responses reported on their experience with performance-based contracting. In doing so, transit agencies stated variously that performance-based contracts permit an agency to state what its requirements are while relying on the contractor to determine the best way to deliver the service, or product, in accordance with industry standards or best practices;²¹³ that incentives and liquidated damages are additional tools to obtain on-time, on-budget performance from vendor partners;²¹⁴ that the method of contracting allows for the evaluation of each submittal in accordance with the needs of the agency as outlined in the procurement documents;²¹⁵ and that liquidated damages, for example, are a useful method to enforce delivery or performance requirements.²¹⁶

Transit agencies consider the use of performance-based clauses to be another aspect of the best practices to use in securing the timely performance of their construction and other contracts. For example, transit agencies stated that they have lower costs, fewer claims and disputes, and faster completion of contracts;²¹⁷ that there is a greater focus by a contractor on the areas that are important to the agency as the owner;²¹⁸ and that the potential for assessing liquidated damages motivates contractors to recover and mitigate schedule delays.²¹⁹

Other agencies also observed that contracts are completed on time;²²⁰ that the use of liquidated-damage clauses in construction contracts causes an agency in turn to provide timely milestones and contract-completion dates;²²¹ that such clauses facilitate project and contract management because they encourage early dialogue to avoid performance issues;²²² that a contractor is motivated to achieve set goals with an attendant increase in customer service and on-time performance;²²³ and that the use of set goals informs contractors what is expected of them, and, moreover, improves a transit agency's management of a contract.²²⁴

SANDAG stated that, with respect to one performance-based contract, the contractor exceeded each milestone, was more motivated and easier to work with, and exceeded the "tight schedule" for the project.²²⁵ COTA in Ohio reported that the use of performance-based contracting improved trip productivity from 1.48 in 2009 to 1.49 in 2011; that on-time performance improved from 94.5 percent in 2009 to 95.0 percent in 2011; and that missed trips declined from 19 per month in 2009 to 5 per month in 2011.²²⁶

In sum, transit agencies reported that performance-based contracting means the establishment of clearly-defined objectives, milestones, and standards; lower costs; improved performance by a contractor, including more on-time performance; increased competition; and the ability to recover costs caused by nonperformance.²²⁷ One agency stated that, with respect to service contracts, the use of performance-based contracting has resulted in excellent performance, the contracts are a useful training tool, and managers are more involved in the performance of the system.²²⁸

B. Risks in Using Incentive Payment and Liquidated-Damages Clauses

Transit agencies did advise that there are some risks or adverse effects as a result of using performance-based contracts. The agencies reported that in their experience, the contracts require a more structured inspection system for documenting problems with performance; clarifying issues involving the scope of the work; validating performance deficiencies prior to deductions; and taking corrective actions—all factors that necessitate additional staff time to supervise and complete.²²⁹ Another agency reported that the monitoring of performance may be difficult and that because monitoring is labor intensive, performance-based contracts may generate additional costs, including legal fees.²³⁰ As one agency stated, there is an administrative burden in enforcing performance-based clauses.²³¹

Because there may be differing levels of experience and familiarity with performance-based contracts, problems may arise during the "solicitation development and contract performance."²³² Furthermore, experience is required in writing performance-based specifications, statements of work, scope of services, and quality assurance surveillance plans.²³³ One agency stated that an agency's personnel must be responsive to a contractor's requests for information so that the

²¹³ Survey response of Capital MTA.

²¹⁴ Survey response of LYNX.

²¹⁵ Survey response of Fort Worth Trans. Auth.

²¹⁶ Survey response of LACMTA.

²¹⁷ Survey response of DART-Dallas.

²¹⁸ Survey response of Utah Transit Auth.

²¹⁹ Survey response of SEPTA.

²²⁰ Survey response of Greater N.H. Transit Dist.

²²¹ Survey response of MBTA.

²²² Survey response of MTA Metro-North.

²²³ Survey response of Orange County Transp. Auth.

²²⁴ Survey response of San Joaquin RTD.

²²⁵ Survey response of SANDAG.

²²⁶ Survey response of COTA.

²²⁷ Survey responses of Omnitrans and TriMet.

²²⁸ Survey response of San Diego MTS.

²²⁹ Survey response of Capital MTA.

²³⁰ Survey response of Orange County Transp. Auth.

²³¹ Survey response of LACMTA.

²³² Survey response of Capital MTA.

²³³ *Id.*

agency does not delay a contractor in meeting milestones established by the contract.²³⁴

C. The Effect of Incentive Payment and Liquidated-Damages Clauses on Contract Claims

Although not providing any details, only two agencies reported having been involved in any litigation over an incentive payment or a liquidated-damages clause.²³⁵ Some litigation was avoided through negotiated settlements. Capital MTA in Austin reports that liquidated damages were part of the sum of \$750,000 paid to Capital MTA in a settlement involving a contract for the construction of an operations and maintenance building for the agency.²³⁶ The NYCT stated that it

reached a settlement with a contractor that claimed to incur costs for manpower overtime, night and weekend work performed in order to earn early completion incentives. The work was not completed on time. The contractor attributed [its] inability to meet the deadline for [the] incentive due to actions...by NYC Transit. A compromise was reached prior to the claim being adjudicated.²³⁷

One agency stated that performance-based contracting has resulted in no litigation for the agency,²³⁸ but the MBTA stated that there have been a few claims that were settled through negotiations with contractors.²³⁹ Although the use of liquidated-damages clauses are useful as leverage in resolving disputes with contractors,²⁴⁰ one agency stated that their use may increase the potential for the termination of a contract for nonperformance.²⁴¹ Finally, if managed too aggressively or brusquely, performance-based contracting may “drive a wedge” between the transit agency and the contractor.²⁴²

D. Potential Claims in Connection with Performance-Based Contracting

1. Contractor Claims for Acceleration Costs to Meet Deadlines

A transit agency needs to be careful in the handling of incentive payments or assessing of liquidated damages as a contractor may accelerate the work to avoid liquidated damages or to claim an incentive payment, plus claim the cost of acceleration. Four transit agencies stated their agency has experienced claims for additional contractor costs based on a contractor’s alleged

acceleration of the work to avoid an assessment of liquidated damages or to earn an incentive payment under a contract.²⁴³

Although written from the perspective of federal procurement and contracts, one source explains that “[t]he constructive change doctrine...has been invoked where the government unjustifiably orders the contractor to speed up the performance of the work or implement a ‘recovery schedule’—that is, a constructive acceleration—thus entitling the contractor to an equitable adjustment under the changes clause.”²⁴⁴ As the FTA warns, an agency “must be very careful...not to motivate the contractor to spend any amount of money it takes in order to meet the delivery date and earn the fee.”²⁴⁵ FTA also cautions against using a cost-type contract in which the only incentive is delivery because such an approach may “motivate the contractor to incur very high costs in order to earn the delivery incentive.”²⁴⁶

As one court has observed, an explicit order to accelerate is not required:

An order to accelerate need not be expressed as a specific command by the government unit, but may be constructive. A constructive acceleration order may exist, when the government unit merely asks the contractor to accelerate or when the government expresses concern about lagging progress. Whether a constructive acceleration order was given to a contractor is a question of law. (citations omitted).²⁴⁷

There may be constructive acceleration when a “contracting officer has refused a valid request for time extensions or threatened other action that requires the contractor to accelerate its work to avoid liquidated damages or other risk of loss.”²⁴⁸ Another form of acceleration is when the government interprets the contract incorrectly, thus forcing an acceleration of the work.²⁴⁹ In such cases the contractor may be entitled to recover the costs related to the acceleration.²⁵⁰

It should be noted that there is no FTA prohibition on having an incentive contract in which the incentive is lost if the product is delivered even 1 day late, an issue that has arisen in some nontransit construction contract cases.

In *Department of Transportation v. Anjo Construction Co.*,²⁵¹ involving a contract with the DOT to reha-

²⁴³ Survey responses of COTPA, CTDOT, NYCT, and MBTA.

²⁴⁴ SMITH, CURRIE & HANCOCK, *supra* note 21, at 303.

²⁴⁵ FTA, Incentive Contracts, *supra* note 45.

²⁴⁶ *Id.*

²⁴⁷ *Dep’t of Transp. v. Anjo Constr. Co.*, 666 A.2d 753, 757 (Pa. Commw. Ct. 1995).

²⁴⁸ SMITH, CURRIE & HANCOCK, *supra* note 21, at 303–04.

²⁴⁹ *Id.* at 305.

²⁵⁰ *Id.* at 304. *See id.* for five elements normally required to establish a claim for constructive acceleration. *See also* Utley-James, Inc., GSBGA No. 5370, 85-1 BCA ¶ 17816 (1985), *aff’d* 14 Cl. Ct. 804 (1988).

²⁵¹ 666 A.2d 753. *See* SNC-Lavalin Am., Inc. v. Alliant Tech Systems, Inc. 2012 U.S. Dist. LEXIS 61787, at *36, stating

²³⁴ Survey response of SANDAG.

²³⁵ Survey responses of CTDOT and Orange County Transp. Auth.

²³⁶ Survey response of Capital MTA.

²³⁷ Survey response of NYCT.

²³⁸ Survey response of COTPA.

²³⁹ Survey response of MBTA.

²⁴⁰ Survey response of San Mateo County Transit Dist.

²⁴¹ Survey response of Omnitrans.

²⁴² Survey response of San Diego MTS.

bilitate a bridge in the Pittsburgh area, the contract originally required the work to be completed by December 31, 1987, and contained incentive/disincentive clauses to encourage timely completion. In one incentive clause, Anjo was to receive \$43,000 for each weekend less than the maximum of six permitted by the contract that it closed the bridge. A second incentive clause provided that for each day the bridge was opened to unrestricted traffic prior to January 1, 1988, Anjo would receive \$14,350 per day up to a maximum of 100 days. Thus, the maximum incentive payment that Anjo could earn was \$1,435,000.²⁵²

Because of errors in an engineering firm's designs, resulting in reconstruction of the bridge and "protracted delays," Anjo was forced to accelerate its work under the contract, causing an increase in the company's labor and other costs. Although Anjo notified the DOT on January 30, 1987, that the design errors would seriously delay the project, the DOT did not immediately adjust the project's completion date.²⁵³ Ultimately the completion date was changed to March 18, 1988; however, Anjo completed the project by December 9, 1987, and received the full incentive. Afterwards, Anjo submitted a claim for extra labor costs and profit on the costs as well as for other extra work and costs.²⁵⁴

The Board of Claims ruled in Anjo's favor on damages sought for acceleration costs and other expenses but denied other aspects of the claim, such as the claim for profits on the additional labor costs.²⁵⁵ On appeal, Anjo argued that the denial of part of its claim was error while the DOT argued that Anjo was not entitled to acceleration damages and that the Board had disregarded language in the contract that precluded a claim "based on impacts from extra work."²⁵⁶

The DOT contended that Anjo was not entitled to damages for extra labor costs because the department never ordered Anjo to accelerate its performance. However, the court stated that

[a]cceleration occurs when a contractor speeds up the pace of its work, faster than the rate prescribed in the original contract. A contractor may recover for the in-

creased costs incurred as a result of accelerating performance, when (1) its own delays in performance are excusable, (2) the contractor was ordered to accelerate, and (3) the contractor did so and sustained extra costs.²⁵⁷

The court agreed with the Board that the DOT constructively ordered Anjo to accelerate its work. Moreover, a memorandum of understanding "stated that DOT would consider costs previously incurred by [Anjo], which have been identified as necessary to accelerate the work in an attempt to maintain the project schedule." (Internal quotation marks omitted.)²⁵⁸

Even though the DOT ultimately extended the contract, the court held that the DOT had not granted the extension within a reasonable time, noting that Anjo had begun accelerating its work prior to the extension.²⁵⁹ Furthermore, the court agreed that the acceleration was not to earn the incentive payment but to meet project deadlines, pointing out that Anjo's extra labor cost exceeded the incentive payment by \$200,000.²⁶⁰

Another acceleration case is *Edward Kraemer & Sons, Inc. v. City of Overland Park*.²⁶¹ Edward Kraemer & Sons (Kraemer) repeatedly requested a change in the completion date of certain aspects of a highway construction project to reflect the department's delay in issuing a notice to proceed. As a result, Kraemer adopted an accelerated work schedule to meet the scheduled date of completion.²⁶² A jury awarded Kraemer \$465,000 in incentive payments but awarded no damages for costs associated with the accelerated work schedule.²⁶³ The appellate court affirmed, holding, *inter alia*, that Kraemer's cause of action for breach of contract did not accrue until Kraemer completed the work and demanded the incentive payments and the cities of Overland Park and Merriam had rejected the demand.²⁶⁴

In *James Cape & Sons Co. v. Illinois*,²⁶⁵ involving a highway construction contract, the contract had a completion date for the work of October 30, 1993; a liquidated damages provision for delayed completion; and an incentive provision for early completion. The contractor alleged that certain events attributable to the State resulted in additional cost to perform the work and a delay of 64 days in completion.²⁶⁶ The special provisions to the contract stated:

Should the contractor be delayed in the commencement, prosecution or completion of the work for any reason,

[t]he majority of cases involving claims for constructive acceleration have been litigated in the federal agency appeals boards and the United States Court of Federal Claims, and have involved construction or procurement contracts with the federal government. The theory has also been utilized, however, in cases involving claims against private contractors, as well as state and local government entities.

(citing *Anjo*, McDevitt & Street Co. v. Marriott Corp., 713 F. Supp. 906, 915 (E.D. Va. 1989); *Envirotech Corp. v. Tennessee Valley Auth.*, 715 F. Supp. 190, 191 (W.D. Ky. 1988); *Sherman R. Smoot Co. v. State*, 136 Ohio App. 3d 166, 170, 736 N.E.2d 69, 72 (2000); and *Fru-Con Corp. v. State of Illinois*, 50 Ill. Ct. Cl. 50, 51 (1996)).

²⁵² *Anjo*, 666 A.2d at 756.

²⁵³ *Id.*

²⁵⁴ *Id.*

²⁵⁵ *Id.* at 757.

²⁵⁶ *Id.*

²⁵⁷ *Id.* (citing *Norair Eng'g Co. v. United States*, 229 Ct. Cl. 160, 666 F.2d 546 (Ct. Cl. 1981)).

²⁵⁸ *Id.* at 757.

²⁵⁹ *Id.* at 758.

²⁶⁰ *Id.*

²⁶¹ 19 Kan. App. 2d 1087, 880 P.2d 789 (1994).

²⁶² *Id.* at 1088, 880 P.2d at 791.

²⁶³ *Id.* at 1089, 880 P.2d at 791.

²⁶⁴ *Id.* at 1093, 880 P.2d at 793.

²⁶⁵ 52 Ct. Cl. 322 (Ill. Ct. Cl. 2000).

²⁶⁶ *Id.* at 324.

there shall be no extension of the incentive payment calculation date even though there may be granted an extension of time for completion of the work unless significant extra work is added to the contract by the Department.

(Emphasis added.)²⁶⁷

The contract included three special provisions, one of which was that

[t]he Liquidated Damages Deadline would be extended beyond October 30, 1993, for events described in Art. 108.09(b) of the Specifications, which included: delays due to causes beyond the control and without the fault or negligence of the contractor, INCLUDING ACTS OF GOD, AND WORK ADDED WHICH AFFECTS PROGRESS ON THE CONTROLLING ITEM.²⁶⁸

The claimant argued that although it substantially completed the work prior to the deadline, the claimant incurred over \$3 million in additional and unreimbursed costs, in part because of significant extra work added by Illinois DOT (IDOT). The court stated

IDOT failed to comply with contract specifications and industry practices. In addition to not reimbursing Claimant for the costs related to the foregoing, IDOT refused repeated requests by Claimant to extend the liquidated damages deadline and the incentive payment deadline. Faced with the prospect of unlimited liquidated damages, Claimant accelerated its efforts beyond what was required by the contract. While IDOT continually assured Claimant that Claimant's additional costs would be reimbursed, IDOT disavowed all prior assurances once substantial completion of the work was achieved.

(Emphasis added.)²⁶⁹

As for the applicable law, “[t]he general rule is that a contractor is bound by the damage provisions of the contract and has no right to additional compensation for delays which prevent the contractor from completing the contract unless the delays are the sole responsibility of the State.”²⁷⁰ The court stated, however, that “[i]t is inevitable there will be some delays and delay will be tolerated if reasonable” and that “[i]t is Claimant's burden to prove the contract, the breach, and the damages....”²⁷¹ However, when

“the evidence shows more probably than not that the respondent should have granted reasonable extensions of time for delays due to unforeseen causes beyond claimant's control and without claimant's fault or negligence, then claimant is entitled to all retainage without liquidated damages.” ...The State should allow an extension where the cause is not the fault of the claimant.²⁷²

²⁶⁷ *Id.* at 327.

²⁶⁸ *Id.* at 330.

²⁶⁹ *Id.* at 330. The court's opinion provides details on the extra work performed.

²⁷⁰ *Id.* at 360 (citing *Illinois Constructors Corp. v. State*, 45 Ill. Ct. Cl. 124 (1993) (citing *Johnson County Asphalt v. State*, 39 Ill. Ct. Cl. 36 (1987) and *Walsh Constr. Co. v. State*, 24 Ill. Ct. Cl. 441 (1964))).

²⁷¹ *Id.* at 360.

²⁷² *Id.* (citing *Fruin Colmon Contracting Co. v. State*, 26 Ill. Ct. Cl. 138 (1967); *J.F., Inc. v. State*, 41 Ill. Ct. Cl. 5 (1988);

2. Disputes Over the Contract Documents and Their Interpretation

A TRB Synthesis reports that “[a] number of studies have examined the underlying causes of claims and disputes and concluded that deficiencies in contract documents typically account for half of all problems and site conditions account for 20 percent.”²⁷³ Five transit agencies responding to the survey stated that their agency had experienced claims based on the parties' differing interpretation of a contract specifically in regard to a liquidated damages or an incentive-payment clause in a contract.²⁷⁴

*Trocom Construction Corp. v. City of New York*²⁷⁵ involved a contract for the reconstruction of a portion of Sixth Avenue in Manhattan for which the plaintiff was to perform soil borings. The contract included payment incentives for early completion.²⁷⁶ After a dispute arose over how to perform the borings on the west side, a Contract DRB agreed both that the plaintiff's interpretation of the contract specifications was reasonable and that the plaintiff was entitled to compensation for the extra work performed. The Contract DRB did not have jurisdiction to decide the plaintiff's claim for the incentive fee. The trial court thereafter granted the defendant's motion for summary judgment, reversed, and dismissed the complaint.

The appellate division reversed the trial court's order, denied the City's motion for summary judgment, and remanded the matter for further proceedings. The court held that the bonus is “an element of damages, naturally flowing from the breach....”²⁷⁷ Second, the court rejected the “defendant's argument that the bonus is barred by the ‘no damages for delay’ provision of the contract. Compensation for the loss of an incentive bonus is not ‘damages for delay’ within the meaning of such a provision.”²⁷⁸ The appeals court held that

Davinroy v. State, 44 Ill. Ct. Cl. 268 (1991); *McHugh Constr. Co. v. State*, 27 Ill. Ct. Cl. 232 (1969)).

²⁷³ CALLAHAN, *supra* note 19, at 18.

²⁷⁴ Survey responses of CTDOT, MBTA, NYCT, Orange County Transp. Auth., and San Mateo County Transit Dist.

²⁷⁵ 51 A.D.3d 533, 859 N.Y.S.2d 41 (App. Div. 1st Dep't 2008).

²⁷⁶ *Id.* at 533, 859 N.Y.S.2d at 41.

²⁷⁷ *Id.*

²⁷⁸ *Id.* at 534, 859 N.Y.S.2d at 42. See also *Plato General Constr. Corp. v. Dormitory Auth. of the State of New York*, 21 Misc. 3d 1138A, 875 N.Y.S.2d 823 (N.Y. Supreme, Kings County (2008)) (stating that

a no-damage-for-delay clause may not be invoked to bar the recovery of damages for (1) delays caused by the [owner's] bad faith or its willful, malicious, or grossly negligent conduct, (2) unanticipated delays, (3) delays so unreasonable that they constitute an intentional abandonment of the contract by the [owner], and (4) delays resulting from the [owner's] breach of a fundamental obligation of the contract.

(citing *Trocom Constr. Corp. v. City of New York*, *supra* note 275; *Trataros Constr., Inc. v. N.Y. City Hous. Auth.*, 34 A.D.3d 451, 453, 823 N.Y.S.2d 534 (2006); *Eldor Contr. Corp. v. County of Nassau*, 6 A.D.3d 654, 655, 775 N.Y.S.2d 556 (2004);

the trial court had overlooked the plaintiff's evidence that at least raised a triable issue whether the plaintiff could have completed the work within the 30-day period specified in the contract to earn the west side bonus.²⁷⁹

In *McCarthy Brothers Construction Co.*,²⁸⁰ pursuant to a contract for the construction of housing units for the elderly, McCarthy was entitled to an incentive payment if its work was completed at a cost savings by the promised date.²⁸¹ The issue was not the amount of the incentive but whether the work was completed prior to the required date of completion.

Whether the stated date of completion had been met was a matter of the interpretation of the contract, more specifically whether the contract, identified as FHA Form 2442A, "Construction Contract—Cost Plus," took "precedence over all inconsistent provisions in the...AIA General Conditions, forming part of the contract."²⁸² The inconsistency at issue had to do with the person who was to determine when there was substantial completion—whether it was the architect or HUD.²⁸³ The court held that the contract was unambiguous. First, the FHA Form 2442A construction contract took precedence over any inconsistent provision in the AIA General Conditions.²⁸⁴ Second, Article 2D of the contract provided that HUD's representative determines the date of substantial completion.²⁸⁵ As noted previously, the court rejected McCarthy's argument that the HUD representative's determination regarding lack of substantial completion was one "without any guidelines and totally at his own whim and complete discretion" and that the date of substantial completion should be the date that the architect certified that the contract was substantially complete.

Another case involving a contract with an early-completion incentive/liquidated-damages clause is *Milton J. Womack v. House of Representatives of the*

State of Louisiana,²⁸⁶ which arose out of renovations of the State Capitol building. Because the plaintiff failed to finish by the stated completion date, the House did not pay the early completion bonus. The trial court ruled that the plaintiff and the House "fully understood that in no event[] would there be an extension of the early completion incentive date."²⁸⁷ The issue was whether the contractor was entitled to the bonus when the delay in completion was caused by the specifications' failure to discover and disclose an X-brace in a wall that was the cause of the delay. The court held that the architect retained by the House was at fault. However, the contract between the House and the architect was not in evidence; consequently, the court held that the plaintiff failed to establish the House's vicarious liability for the conduct of the architect, an independent contractor.²⁸⁸

The court held that the trial court's decision was not "clearly wrong" in permitting parol evidence to explain the meaning of the bonus clause that did not permit for any reason an extension of the date of completion in regard to the bonus payment.²⁸⁹ Although the House was not liable, the court reversed the judgment below in favor of the architect and awarded judgment and damages to the contractor against the architect in the amount of \$100,000.²⁹⁰

*Ray Bell Construction Co., Inc. v. Tennessee*²⁹¹ concerned an alleged breach of an incentive clause in a contract with the Tennessee DOT (TDOT). The Claims Commission allowed parol evidence to address a "latent ambiguity" to determine that the contractor was entitled to a modification of the incentive provision. In order of precedence, the Supplemental Specifications controlled the Standard Specifications; the contract plans controlled both the Supplemental and Standard Specifications; and the Special Provisions controlled the contract plans and Supplemental and Standard Specifications.²⁹² Special Provision 108(B) addressed liquidated damages, incentive payments, and disincentive payments.²⁹³

Bovis Lend Lease LMB v. GCT Venture, 6 A.D.3d 228, 229, 775 N.Y.S.2d 259 (2004); *Tougher Indus. v. Northern Westchester Joint Water Works*, 304 A.D.2d 822, 822, 757 N.Y.S.2d 874 (2003); *Abax Inc. v. N.Y. City Hous. Auth.*, 282 A.D.2d 372, 373, 723 N.Y.S.2d 490 (2001); *Clifford R. Gray, Inc. v. City School Dist. of Albany*, 277 A.D.2d 843, 844, 716 N.Y.S.2d 795 (2000)).

²⁷⁹ *Trocom Constr.*, 51 A.D.3d at 535–36, 859 N.Y.S.2d at 43.

²⁸⁰ 832 F.2d 463 (8th Cir. 1987).

²⁸¹ Art. 3A(3) of the contract provided:

If the work is completed prior to the time for completion specified in this contract, the Owner shall make an incentive payment to the Contractor. The amount of the payment shall be ascertained according to the instructions on the attachment entitled Incentive Payment Computation which is made a part hereof.

Id. at 465.

²⁸² *Id.* at 465.

²⁸³ *Id.* at 467 n.6.

²⁸⁴ *Id.* at 467.

²⁸⁵ *Id.* at 468.

²⁸⁶ 509 So. 2d 62 (La. App. 1987).

²⁸⁷ *Id.* at 64.

²⁸⁸ *Id.* at 68.

²⁸⁹ *Id.*

²⁹⁰ *Id.* at 69.

²⁹¹ 2010 Tenn. App. LEXIS 737, at *1, 2 (Tenn. App. 2010).

²⁹² *Id.* at *7.

²⁹³ *Id.* at 5. In part, Special Provision 108(B) stated:

The project shall be completed in its entirety on or before December 15, 2006.

For each calendar day prior to December 15, 2006, that all work in the original contract has been completed and all lanes are opened to the free, safe and unrestricted passage of traffic, an incentive payment of ten thousand dollars (\$10,000) per day shall be made to the contractor as an incentive. However, the maximum amount of incentive payments shall not exceed two million five hundred thousand dollars (\$2,500,000).

For each day after December 15, 2006, that all work in the original contract is not completed, the sum of ten thousand dollars (\$10,000) per day shall be deducted from monies due

Both the Standard Specifications and Special Provisions of the contract addressed the matter of time extensions. As explained by Ray Bell's project manager, one paragraph of the Standard Specifications dealt with pro-rata extensions when time extensions were granted on a pro-rata basis for increased work beyond the original bid.²⁹⁴ The second paragraph dealt with "delays beyond a contractor's control, such as a change in design or TDOT's inability to secure an easement to the property."²⁹⁵

Although there were numerous delays beyond the contractor's control, "the Redesign and Easement delays were the only ones for which [Ray Bell] sought additional time."²⁹⁶ TDOT agreed to an extension of time for some of the delays but "expressly stated that the time extension would not apply to the incentive payment."²⁹⁷

The project was funded 90 percent by the Federal Highway Administration (FHWA), which advised in early 2005 of "a change in policy by FHWA to eliminate the use of the pro-rata method for calculating time extensions when there are quantity overruns on projects with incentive clauses."²⁹⁸ Thereafter, TDOT

the Contractor as a disincentive. The amount of monies that may be deducted as a disincentive shall be unlimited except that the disincentive may be waived if the working time is extended in accordance with the Standard Specifications.

Id. at *5–6.

²⁹⁴ *Id.* at *3. Standard Specification 108.06 stated:

The number of days for performance allowed in the Contract as awarded is based on the original quantities as defined in Subsection 102.03. If satisfactory fulfillment of the Contract requires performance of work in greater quantities than those set forth in the proposal, the contract time allowed for performance shall be increased on the basis commensurate with the amount and difficulty of the added work. If the Engineer determines that an increase in the contract working time proportionate to the value of the increase in quantities is commensurate with the amount and difficulty of the added work and a written request to extend the time as provided below has not been made, he may proportionately increase the contract working time.

Id. at *3–4.

²⁹⁵ *Id.* at *5. Standard Specification 108.06 also provided:

If the Contractor finds it impossible for reasons beyond his control to complete the Work within the contract time as specified or as extended in accordance with the provisions of this Subsection, he may, at any time prior to the expiration of the contract time specified or as extended, make a written request to the Engineer for an extension of time setting forth therein the reasons which he believes will justify the granting of his request. The Contractor's plea that insufficient time was specified is not a valid reason for extension of time. If the Engineer finds that the Work was delayed because of conditions beyond the control and without the fault of the Contractor, he may extend the time for completion by a properly executed Supplemental Agreement in such amount as the conditions justify. The extended time for completion shall then be in full force and effect the same as though it were the original time for completion.

Id. at *4–5.

²⁹⁶ *Id.* at *7–8.

²⁹⁷ *Id.* at *8.

²⁹⁸ *Id.* at 13–14.

by letter sought approval of the pro-rata method for "existing contracts," a request that was approved.²⁹⁹

Another project for which Ray Bell had a contract with an incentive clause was included on TDOT's list of existing contracts,³⁰⁰ but because of an apparent oversight, the Midtown Interchange Project at issue in this case was omitted. There was other evidence that, prior to February 2005, when FHWA advised of the above change in policy, incentive dates could and had been extended.³⁰¹

The Commission found

that the proof developed over four days of trial establishes clearly that up until February or March of 2005, TDOT and FHWA permitted extensions of completion dates for purposes of earning incentives, even in the face of the language contained in SP108(B).

This case is a strong example of why parol evidence is sometimes admitted in establishing the full intent of parties to a contract.³⁰²

There may well have been a change in FHWA policy in perhaps late 2004 and early 2005 but this contract was entered into well before that...[T]here is no evidence that the ground rules for interpreting the terms of this contract had changed prior to its effective date.³⁰³

The Commission found that Special Provision 108(B) was ambiguous in three ways including with respect to TDOT's past practices.³⁰⁴

A divided Court of Appeals affirmed the judgment of the Claims Commission.³⁰⁵ The court agreed with the Commission's admission of parol evidence to aid in the interpretation of the contract, including

the Commission's findings that a change in the contract completion date could be applied to the incentive date, as evidenced by the admissions in the TDOT letter, the change of the incentive date on another RBCC project with the exact same language, and examples of both exemplary and prohibitory language in numerous other contracts.³⁰⁶

The Supreme Court of Tennessee, however, reversed the Appeals Court's decision and remanded the case to the Court of Claims for modification of the final judgment.³⁰⁷ In contrast to the Claims Commission, the highest court found the contractual provisions to be unambiguous.³⁰⁸ Applying the order of precedence clause, the court held that the completion provision is controlling and governs whether there is to be an ex-

²⁹⁹ *Id.* at 17.

³⁰⁰ *Id.* at *18–19.

³⁰¹ *Id.* at *22.

³⁰² *Id.* at *25.

³⁰³ *Id.* at *29.

³⁰⁴ *Id.* at *31.

³⁰⁵ Ray Bell Constr. Co. v. State, 2010 Tenn. App. LEXIS 737 (Tenn. Ct. App. 2010).

³⁰⁶ *Id.* at *38–39.

³⁰⁷ Ray Bell Constr. Co., Inc. v. Tennessee, Tennessee Dep't of Transp., 356 S.W.3d 384 (2011).

³⁰⁸ *Id.* at 387.

tension of the incentive date.³⁰⁹ Under the completion provision, the completion date could be extended in accordance with the Standard Specifications but “no incentive payment will be made if work is not completed in its entirety by December 15, 2006.”³¹⁰ Thus, the court agreed with TDOT that “[e]ven if the completion date is extended due to circumstances beyond the contractor’s control, no incentive payments are due if the contract was completed after December 15, 2006.”³¹¹

Because the Claims Commission “implicitly” held that the contract was not completed by the December date, Ray Bell was not entitled to an incentive bonus. As explained by the court, the extension provision of the contract allowed for an extension of the contract completion date and of the disincentive date if circumstances warranted because of events beyond the contractor’s control. The completion provision, however, did not provide for an extension of the ultimate date for contract completion, December 15, 2006, to earn the incentive payments.³¹²

Because TDOT had not appealed the Claims Commission’s finding that the completion date should be extended by at least 250 days, the department could not enforce the disincentive penalty in the contract. Although Ray Bell was not entitled to an incentive payment, the court remanded the case to the Claims Commission to enter judgment for Ray Bell for the liquidated damages and disincentive payments previously withheld by TDOT.³¹³

3. Oral Contract for Incentive Payment

In *Marathon Enterprises, Inc. v. H. Angelo and Company, Inc.*,³¹⁴ the Fourth Circuit affirmed the dismissal of a complaint for an incentive fee. Although it may be assumed that any contract or supplement or addendum thereto necessarily would be in writing, Marathon Enterprises claimed to have an oral agreement to provide management services on a government contract amounting to more than \$5 million. The plaintiff alleged that an Angelo representative orally promised an incentive payment if the direct costs of the project were less than \$4,435,000. The plaintiff claimed an incentive of \$273,309. However, although the plaintiff alleged how the incentive payment was to be calculated, the court concluded that there had not been a meeting of the minds on the contract. “Specifically, the judge concluded that there was not meeting of the minds on how ‘direct costs’ would be calculated in determining whether the project came in under the (target) direct cost figure of \$4,435,000,” or on the sharing of prof-

its on change orders, or on the calculations of Angelo’s home office overhead and bond costs.³¹⁵

4. Federal Agency Liability for an Incentive Payment

In *Thompson Tower Limited Dividend Housing Association v. United States*,³¹⁶ at issue was the builder’s early completion by 9 months of the construction of a housing project. The early completion saved the sponsor of the project approximately \$200,000 in interest, taxes, and property and mortgage insurance premiums. HUD disapproved the certification of an incentive payment under the contract. The court held that HUD was not liable for the incentive because HUD was not a party to the construction contract.³¹⁷ Furthermore, HUD was “not liable to third parties whose contracts with others are subject to the terms, approval, or supervision of the agency.”³¹⁸

CONCLUSION

Because of the importance of transit agency contracts being performed on time and within budget, transit agencies are using performance-based contracting for all types of contracts, including contracts for construction projects, for the procurement of capital equipment such as rolling stock, and for services. Only three agencies responding to the survey state that they are precluded in their state from using the clauses in certain kinds of contracts. Thus, the contracts of transit agencies may include payment incentives for early or on-time performance and liquidated damages for delay.

The FTA encourages the use of the clauses for any project receiving financial assistance from the FTA, such as funding for fixed guideways and for equipment

³¹⁵ *Id.* at *3.

³¹⁶ 228 Ct. Cl. 766, 768 (Ct. Cl. 1981). *See also* Maniere v. United States, 31 Fed. Cl. 410, 416, n.2 (1994) (quoting *Thompson Tower Ltd. Dividend Housing Ass’n*, stating, “Congress has not given this court jurisdiction over suits on contracts where there is no privity between the plaintiff and the Government” and “[p]rivacy of contract encompasses a contractual relationship between the claimant and the Government”) (*citing* *Erickson Air Crane Co. v. United States*, 731 F.2d 810, 813 (Fed. Cir. 1984); *Continental Ill. Nat’l Bank & Trust Co. v. United States*, 112 Ct. Cl. 563, 566, 81 F. Supp. 596, 598 (1949); *Thomas Funding Corp. v. United States*, 15 Cl. Ct. 495, 499 (1988)).

³¹⁷ *Thompson Tower Ltd.*, *supra* note 316, at 770 (*citing* *Aetna Casualty and Surety Co. v. United States*, 153–54, 655 F.2d 1047, 1052–53 (1981); *H.A. Ekelin & Assocs. v. United States*, 225 Ct. Cl. 561 (1980); *cf.* *Somerville Technical Services v. United States*, 226 Ct. Cl. 291, 296, 640 F.2d 1276, 1279–81 (1981) (no privity between contractor and Federal Housing Administration (FHA) on contracts FHA is not a party to); *D. R. Smalley & Sons, Inc. v. United States*, 178 Ct. Cl. 593, 596–98, 372 F.2d 50, 506–08 (1967) (no privity arises between contractor and Government from latter’s intimate involvement in details of contract)).

³¹⁸ *Thompson Tower Ltd.*, *supra* note 316.

³⁰⁹ *Id.* at 388.

³¹⁰ *Id.*

³¹¹ *Id.*

³¹² *Id.*

³¹³ *Id.* at 389.

³¹⁴ 2000 U.S. App. LEXIS 20161 (4th Cir. 2000) (per curiam) (unrpt.).

and other capital acquisitions. The FTA's CPIR discussed previously states that many transit agency contracts throughout the nation already provide for payment incentives and liquidated damages. However, although transit agencies responding to the survey provided copies of contractual provisions authorizing incentive payments, only four agencies had made incentive payments in the preceding 3-year period. Only five agencies had collected or been credited with liquidated damages in the same period.

The agencies' evaluation of the clauses is quite supportive of the use of performance-based contracting. Transit agencies did not report any specific issues or problems with the use of incentive-payment or liquidated-damages clauses because of the type of contract in which they were included. Moreover, the agencies did not indicate that a particular type of contract or incentive-payment or liquidated-damages clause was more or less successful than others. The agencies did not suggest that there were any difficulties in obtaining contractors for a construction project or in procuring goods or services because of a policy of including, for example, a liquidated-damages clause in a contract.

As explained in a GAO Report, one of the keys to effective performance-based contracting is well-defined performance standards. The agencies indicated that they primarily use performance-based contracting for construction projects and for the procurement of capital equipment. However, consistent with the GAO's conclusion that incentive-payment and liquidated-damages clauses are suitable in contracts for services, transit agencies are using the clauses when procuring services, as well as by some agencies in management contracts. Transit agencies provided copies of contracts demonstrating that their contracts include definitive and objective means and schedules for monitoring performance and state how incentive payments or liquidated damages are to be determined or assessed.

Other than by providing copies of relevant contracts, the agencies did not indicate how they arrive at a specific hourly or daily rate for incentives or liquidated damages. Nevertheless, the agencies did not report any litigation involving the specific amounts chosen and designated in their contracts. Only two agencies responding to the survey reported having been involved in any litigation specifically over an incentive-payment or a liquidated-damages clause; a few agencies reported resolving some potential cases through settlements.

Although supportive of the method of contracting, some agencies reported that in their experience there is some administrative burden imposed by performance-based contracts. Nevertheless, it appears that transit agencies consider the use of performance-based contracting to be another best practice on which to rely to secure the timely performance of their construction and other contracts.

APPENDIX A—SURVEY QUESTIONS

TCRP J-5, STUDY TOPIC 14-3, CONTRACTUAL MEANS OF ACHIEVING HIGH LEVEL PERFORMANCE IN TRANSIT CONTRACTS

Agency Name: _____

Name of Employee: _____

Job Title: _____

Contact telephone/cell phone number: _____ / _____

Email address: _____

How many years have you been with the agency? _____

NOTE:

(a) Please provide copies of or an Internet-link(s) for any contracts or other documents identified in your responses.

(b) In responding to the following questions, please feel free to attach extra pages as needed.

1. Is your agency using performance-based contracting (*e.g.*, liquidated damages and/or incentive clauses) in your construction contracts, maintenance and repair contracts, service contracts and/or procurement contracts (*e.g.*, for materials, supplies, or rolling stock)?

YES ___ NO ___

If your answer is “yes”, please answer the following questions.

2. For the most recent three-year period for which your agency has records, how much each year has your agency:

(a) collected or been credited in liquidated damages for delay in contract completion?

(b) paid in incentive awards or bonuses to a contractor for early or on time completion?

3. For the most recent three-year period for which your agency has records, has your agency made incentive payments to contractors for submitting ideas that lower the cost of a project?

YES ___ **NO** ___

If your answer is "yes," please state the amount for each year?

4. Please state whether your agency uses liquidated damages and/or incentive payment clauses in any of the agency's contracts for:

(a) construction; **YES** ___ **NO** ___

(b) management; **YES** ___ **NO** ___

(c) maintenance and repairs; **YES** ___ **NO** ___

(d) procurement of materials; **YES** ___ **NO** ___

(e) procurement of supplies; **YES** ___ **NO** ___

(f) procurement of rolling stock; **YES** ___ **NO** ___

(g) procurement of services, including professional services such as for architects, engineers or others? **YES** ___ **NO** ___

5. For performance-based contracting please state whether your agency's contracts:

(a) set forth the contract requirements in terms of the expected results, or

YES ___ NO ___

(b) alternatively, describe or specify the manner or methods to be used in performing the contract;

YES ___ NO ___

(c) include measurable and verifiable performance criteria, goals, or standards;

YES ___ NO ___

(d) include performance guarantees;

YES ___ NO ___

(e) describe how the contractor's performance will be evaluated pursuant to a quality assurance plan or program; and/or

YES ___ NO ___

(f) include a provision regarding how liquidated damages are to be assessed and/or the amount of incentive payments are to be determined?

YES ___ NO ___

If your answer is "yes" to any subpart(s), please provide a copy of or an Internet-link for any contract provisions used by your agency.

6. Please identify and explain the types of contracts (e.g., fixed fee, cost-plus, design-build, etc.) with performance-based provisions that your agency (a) has used successfully or (b) has not been able to use successfully.

7. In your state are there any types of contracts (e.g., Design-Build, Design-Build-Operate-Maintain (DBOM), and Construction Manager/General Contractor (CM/GC)) that your agency is not permitted to use with a liquidated damages or incentive payment clause?

YES ___ **NO** ___

If your answer is “yes,” please identify the type of contract and provide a citation to any law and/or regulation prohibiting the use of the type of contract.

8. (a) Has your agency experienced claims for additional contractor-costs based on a contractor’s alleged acceleration of the work to avoid an assessment of liquidated damages and/or to earn an incentive payment under a contract?

YES ___ **NO** ___

(b) Has your agency had claims based on the parties’ differing interpretation of a contract specifically in regard to a liquidated damages or an incentive payment clause in the contract?

YES ___ **NO** ___

(c) Has your agency been involved in any claim or litigation regarding a liquidated damages or incentive payment clause in a contract?

YES ___ **NO** ___

If your answer is “yes” to any subpart(s), please discuss the nature of the litigation and the outcome and provide citations to any opinions filed in the case(s).

9. With respect to performance-based contracting, does your agency use any form of surveillance to monitor contractor performance?

YES ___ **NO** ___

If your answer is "yes," please describe the method(s) of surveillance and its implementation and any schedule used for such purpose and/or provide a copy of or an Internet link for any relevant documents.

10. Please describe any benefits experienced by your agency in the use of performance-based contracting.

11. Please describe any adverse effects that your agency has experienced with performance-based contracts, such as delays, claims, litigation, limiting of competition, problems in enforcement of the performance criteria or standards, increased costs, or otherwise.

12. Please include any other comments regarding your agency's use of and experience with performance-based contracting.

Please return your completed survey preferably via e-mail to:

**The Thomas Law Firm
ATTN: Larry W. Thomas
1701 Pennsylvania Avenue, N.W.
Suite 300
Washington, D.C. 20006
Tel. (202) 280-7769: email: lwthomas@cox.net**

APPENDIX B—LIST OF TRANSIT AGENCIES RESPONDING TO THE SURVEY

Bay Metropolitan Transportation Authority (Bay Metro), Bay City, Mich.

Ben Franklin Transit, Richland, Wash.

Capital Metropolitan Transportation Authority (Capital Metro), Austin, Tex.

Central Florida Regional Transportation Authority (LYNX), Orlando, Fla.

Central Arkansas Transit Authority (CATA), North Little Rock, Ark.

Central Ohio Transit Authority (COTA), Columbus, Ohio

Central Oklahoma Transportation and Parking Authority (COTPA), Oklahoma City, Okla.

Columbia Transit and Paratransit, Columbia, Mo.

Connecticut Department of Transportation (CTDOT), Newington, Conn.

Dallas Area Rapid Transit (DART), Dallas, Tex.

Decatur Public Transit System (DPTS), Decatur, Ill.

East Central Intergovernmental Association (The Jule), Dubuque, Iowa

Fort Worth Transportation Authority (The T), Fort Worth, Tex.

Gary Public Transportation Commission, Gary, Ind.

Golden Empire Transit District (GETbus), Bakersfield, Cal.

Greater New Haven Transit District, New Haven, Conn.

Greater Portland Transit District (METRO), Portland, Me.

La Crosse Municipal Transit Utility (MTU), La Crosse, Wis.

Lane Transit District (LTD), Eugene, Or.

Los Angeles County MTA (LACMTA), Los Angeles, Cal.

Manchester Transit Authority (MTA), Manchester, N.H.

Mass Transportation Authority (MTA), Flint, Mich.

Massachusetts Bay Transportation Authority (MBTA), Boston, Mass.

MTA Metro-North Railroad (Metro-North), New York, N.Y.

MTA New York City Transit (NYCT), New York, N.Y.

Omnitrans, San Bernadino, Cal.

Orange County Transportation Authority (OCTA), Orange, Cal.

Oshkosh Transit System, Oshkosh, Wis.

Pine Bluff Transit, Pine Bluff, Ark.

Port Authority/Trans Hudson Corp. (PATH), New York, N.Y.

Rhode Island Public Transit Authority (Rhode Island PTA), Providence, R.I.

Rochester General Regional Transportation Authority (RGRTA), Rochester, N.Y.

San Diego Association of Governments (SANDAG), San Diego, Cal.

San Diego Metropolitan Transit System (San Diego MTS), San Diego, Cal.

San Joaquin Regional Transit District (San Joaquin RTD), San Joaquin, Cal.

San Mateo County Transit District, San Mateo County, Cal.

Southeastern Pennsylvania Transportation Authority (SEPTA), Philadelphia, Pa.

Space Coast Area Transit, Brevard County, Fla.

Stark Area Regional Transit Authority (SARTA), Canton, Ohio

Suffolk County Department of Public Works, Hauppauge and Riverhead, N.Y.

Transit Authority of the City of Omaha (Metro), Omaha, Neb.

Tri-County Metropolitan Transportation District of Oregon (TriMet), Portland, Or.

Utah Transit Authority, Salt Lake City, Utah

APPENDIX C—INDEX TO PERFORMANCE-BASED CLAUSES AND STANDARDS

[Included on enclosed CD-ROM]

| PAGE NUMBERS | NAME OF TRANSIT AGENCY | NAME OF EXHIBIT |
|--------------|---|---|
| A3-1–A3-2 | Capital Metropolitan Transit Authority | Performance Metrics for Contracted Fixed Route Services |
| A3-3–A3-5 | Capital Metropolitan Transit Authority | Performance Metrics from Paratransit Services |
| A3-6 | Capital Metropolitan Transit Authority | Performance Metric from Fleet Detailing Contract |
| A3-7 | Capital Metropolitan Transit Authority | Liquidated Damages– Medical Services Contract (Drug Testing) |
| A3-8–A3-10 | Capital Metropolitan Transit Authority | Performance Metrics for the University of Texas Shuttle Service |
| A3-11–A3-12 | Central Ohio Transportation Authority | Contract Modification |
| A3-13–A3-14 | Central Florida Regional Transportation Authority | Liquidated Damages |
| A3-15 | Central Florida Regional Transportation Authority | Liquidated Damages Check List |
| A3-16–A3-44 | Central Florida Regional Transportation Authority | Performance Matrix |
| A3-45–A3-49 | Central Florida Regional Transportation Authority | Project Management And Liquidated Damages |
| A3-50 | Central Florida Regional Transportation Authority | Vanpool Performance Indicators |
| A3-51–A3-55 | Central Oklahoma Transportation and Parking Authority | Invitation for Bid and Request for Proposal |
| A3-56–A3-57 | Central Oklahoma Transportation and Parking Authority | Invitation for Bid for Services |
| A3-58–A3-59 | Central Oklahoma Transportation and Parking Authority | Vendor Evaluation Form |

| | | |
|---------------|---|--|
| A3-60 | Connecticut Department of Transportation | Contractor Performance Evaluation Rating |
| A3-61–A3-65 | Connecticut Department of Transportation | Incentive and Liquidated Damages Provisions |
| A3-66–A3-70 | Fort Worth Transportation Authority | Solicitation Package with Liquidated Damages Provision |
| A3-71–A3-72 | Mass Transportation Authority | Bid Tender |
| A3-73–A3-76 | Massachusetts Bay Transportation Authority | General Conditions |
| A3-77 | MTA Metro-North Railroad | Metro-North's Damages in Case of Delay |
| A3-78–A3-81 | MTA Metro-North Railroad | Value Engineering Change Proposal |
| A3-82–A3-87 | Orange County Transportation Authority | General Conditions with Value Engineering and Liquidated Damages Clauses |
| A3-88–A3-92 | San Diego Association of Governments | Cost Reduction Incentive |
| A3-93–A3-98 | San Diego Metropolitan Transportation System | Performance Bonuses and Penalties |
| A3-99 | San Joaquin Regional Transportation District | Liquidated Damages |
| A3-100–A3-107 | San Joaquin Regional Transportation District | Service Performance Standards and Incentives |
| A3-108–A3-113 | San Mateo County Transit District | Incentives |
| A3-114–A3-121 | San Mateo County Transit District | Liquidated Damages |
| A3-122 | Tri-County Metropolitan Transportation District of Oregon | Liquidated Damages |

ACKNOWLEDGMENTS

This study was performed under the overall guidance of TCRP Project Committee J-5. The Committee is chaired by **Robin M. Reitzes**, San Francisco City Attorney's Office, San Francisco, California. Members are **Rolf G. Asphaug**, Denver Regional Transportation District, Denver, Colorado; **Sheryl King Benford**, Greater Cleveland Regional Transit Authority, Cleveland, Ohio; **Darrell Brown**, Darrell Brown & Associates, New Orleans, Louisiana; **Robert Brownstein**, Consultant, New York, New York; **Dennis C. Gardner**, Ogletree, Deakins, Nash, Smoak & Stewart, Houston, Texas; **Elizabeth M. O'Neill**, Metropolitan Atlanta Rapid Transit Authority, Atlanta, Georgia; and **James S. Thiel**, Wisconsin Department of Transportation, Madison, Wisconsin. **Rita M. Maristch** provides liaison with the Federal Transit Administration, **James P. LaRusch** serves as liaison with the American Public Transportation Association, and **Gwen Chisholm Smith** represents the TCRP staff.

Transportation Research Board

500 Fifth Street, NW
Washington, DC 20001



NATIONAL ACADEMY OF SCIENCES

1863–2013 • Celebrating 150 Years of Service to the Nation

THE NATIONAL ACADEMIES™

Advisers to the Nation on Science, Engineering, and Medicine

The nation turns to the National Academies—National Academy of Sciences, National Academy of Engineering, Institute of Medicine, and National Research Council—for independent, objective advice on issues that affect people's lives worldwide.

www.national-academies.org

Subscriber Categories: Public Transportation

ISBN 978-0-309-25909-5



9 780309 259095

These digests are issued in order to increase awareness of research results emanating from projects in the Cooperative Research Programs (CRP). Persons wanting to pursue the project subject matter in greater depth should contact the CRP Staff, Transportation Research Board of the National Academies, 500 Fifth Street, NW, Washington, DC 20001.