SECTION 1

THE TRANSPORTATION CONSTRUCTION CONTRACT

A. ROLE OF FEDERAL TRANSPORTATION LEGISLATION AND FUNDING

1. Background Through 2011

In the United States, legal requirements governing highway and bridge construction contracts are closely associated with project funding, an essential aspect of highway and bridge construction. Project funding and associated legal requirements have undergone significant changes in recent decades. They continue to evolve, in ways that have given rise to considerable uncertainty as this volume is being revised and updated, and which may have a considerable impact upon transportation for years to come.

a. Development of the Existing System of Federal Funding and Legal Requirements

In order to understand how project funding issues affect contractual provisions governing highway and bridge construction projects, it is important to consider, albeit briefly, how arrangements for funding transportation projects have evolved over time, what role the relationship between the federal and state governments plays in transportation funding and related legal requirements, and how currently pending policy debates over funding and the federal-state relationship may shape transportation construction contracting for decades to come.

In the early years of the United States, state legislatures typically enacted single charters, one at a time, to authorize special-purpose corporations to build specific individual turnpikes and later, plank roads, with legal powers limited to those roads only. By the early 1900s, state legislatures were consolidating authority to construct, operate, and maintain highways and bridges into the hands of state highway commissions, and granting them broader and more general statewide powers.

In 1916, during World War I, Congress enacted legislation providing federal funding to states to develop an integrated network of highways. In 1921, shortly after the end of that war, Congress passed legislation restricting such federal-aid funding to a set of principal roadways, the origin of what would eventually become the Federal-Aid Primary Highway System. In 1944, during World War II, Congress authorized both the use of federal funds for urban extensions of the primary system and development of a Federal-Aid Highway Secondary System.¹

Following World War II and continued congressional provision of federal highway funding in 1950,² President Eisenhower signed key legislation in 1956, including the Federal-Aid Highway Act, which created the Interstate highway system, and the Highway Revenue Act, which created the federal Highway Trust Fund and linked motor fuel taxes to roadway construction.³ These Acts, and later related enactments,⁴ established the basic pattern for the funding of public highways for the next 50 years.⁵

A decade later, legislation enacted under President Johnson in 1966 established the U.S. Department of Transportation (USDOT), including its Federal Highway Administration (FHWA).⁶ Many states then enacted legislation creating analogous state Departments of Transportation (DOTs). Federal statutes governing federal aid to states for interstate and state highways continued to develop during the 1960s, 1970s, and 1980s.⁷

During the 1990s and early 2000s, Congress enacted three federal surface transportation statutes, building upon prior legislation, which had significant impact upon federal legal requirements governing state construction of federal-aid highways and bridges. In 1991, Congress passed the Intermodal Surface Transportation Efficiency Act of 1991, commonly referred to as "ISTEA." Several years later, Congress passed the Transportation Equity Act for the 21st Century of 1998, commonly referred to as "TEA-21." Then, in 2005, Congress passed the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users, commonly referred to as "SAFETEA-LU."

The periodic congressional enactment of comprehensive multi-year federal surface transportation legislation, over the more than 50-year period between 1950 and 2005, put in place a standardized but evolving set of funding, requirements, and expectations. Congress would, through such legislation, authorize federal aid to states and localities for the construction of highway, bridge, and other surface transportation projects. Con-

¹ Allison L. C. de Cerreno, Why Partnerships? Historical and Legislative Background on Public-Private Partnerships for Surface Transportation, published in Partnerships for New York—Innovative Transportation Financing and Contracting Strategies: Opportunities for New York State, University Transportation Research Center/NYSDOT, Mar. 8, 2006, at 4.

 $^{^{2}}$ The Federal Aid to Highway Act of 1950, Pub. L. No. 81-769, 64 Stat 785.

³ The Federal Aid to Highway/Interstate Highway Act of 1956, Pub. L. No. 84-627, 70 Stat. 374.

 $^{^4}$ The Transportation Act of 1958, Pub. L. No. 85-726, 72 Stat. 731.

⁵ de Cerreno, *supra* note 1, at 4.

 $^{^6}$ Department of Transportation Act, Pub. L. No. 89-670, 80 Stat. 931 (1966).

⁷ See, e.g., the Highway Beautification Act of 1965, Pub. L. No. 89-285, 79 Stat. 1028; the Federal Aid Highway Act of 1973, Pub. L. No. 93-87, 87 Stat. 250; the Transportation Assistance Act of 1982, Pub. L. No. 97-424, 96 Stat. 2097; and the Surface Transportation Act of 1987, Pub. L. No. 100-17, 101 Stat. 132.

⁸ Pub. L. No. 102-240, 105 Stat. 1914 (1991).

⁹ Pub. L. No. 105-178, 112 Stat 107 (1998).

¹⁰ Pub. L. No. 109-59, 119 Stat. 1144 (2005).

gress would also enact or amend related federal requirements governing the planning, funding, design, and construction of federal-aid highway and bridge projects. States would be required to accept such requirements as a condition of receiving federal aid. USDOT, FHWA, and state DOTs would then implement such requirements through USDOT and FHWA regulations, federal-aid project funding agreements between FHWA and state DOTs, FHWA administrative policy guidance to state DOTs, and development of a pattern of custom and practice between USDOT, FHWA, and state DOT officials in the course of ongoing administration.

Most of the provisions of these federal statutes, including ISTEA, TEA-21, and SAFETEA-LU, were codified successively into provisions of Title 23, Highways, and Title 49, Transportation, of the United States Code (USC). Regulations promulgated by FHWA and USDOT implementing such legislation, and elaborating upon its requirements under authority delegated by Congress, were codified into provisions of Title 23, Highways, and Title 49, Transportation, of the Code of Federal Regulations (CFR). FHWA also provided administrative guidance to state and municipal DOTs through a series of formal administrative issuances. Prior to December 1991, the issuance was known as the Federal-Aid Highway Program Manual. From December 1991 to January 2010, it was known as the Federal-Aid Policy Guide (FAPG). The issuance of FHWA Orders 1321.1C and 1340.3 on January 6, 2010, terminated the FAPG and replaced it with an administrative body known as the Federal-Aid Highway Program Policy and Guidance Center.11

This 50-year sequence of federal statutory enactments culminating in SAFETEA-LU, accompanied by FHWA and USDOT regulations and FHWA administrative guidance to state and municipal DOTs, has created a complex framework of federal law governing state and municipal DOTs that apply for and receive federal financial assistance ("federal aid") for the design, construction, and capital reconstruction of Interstate and other state and municipal highways and bridges. Federal law is not the only law governing state and municipal DOTs, which under our federal constitutional system derive their specific powers and duties from state constitutions and state legislative enactments. It has served, however, as a powerful force for nationwide standardization of law and practice governing the planning, design, construction, and reconstruction of Interstate, state, and municipal highways and bridges.

b. The Challenges Confronting Future Transportation Funding and Requirements

By its terms, SAFETEA-LU, the most recent of these comprehensive enactments of federal highway aid and requirements, was originally scheduled to expire in 2009. Due in significant part to the national economic crisis of 2008–2009 and its ongoing impacts, and to policy debates over the best way to address major new fed-

eral-aid highway funding legislation, Congress did not enact such legislation for several years. Instead, Congress extended the effective date of SAFETEA-LU nine times between 2009 and June 2012. Congress also, however, made significant reductions in the federal-aid funding remaining available for the second half of fiscal year (FY) 2011.

In considering continued funding of state and municipal construction of highways and bridges, Congress was also confronted by revenue problems. Since the 1950s, federal funding for highway construction has come from federal and state taxes on sales of gasoline and other motor fuels. The 18.4 cents per gallon federal gas tax was last increased in 1993, however, and its purchasing power has since been eroded by inflation to the equivalent of 11 cents per gallon in 1993 dollars.¹⁴ Due to generally stable or declining fuel consumption resulting from rising fuel prices, poor economic conditions, and increasingly fuel-efficient vehicles, revenues from motor fuel sales taxes have remained stable or declined, limiting revenues available for highway and bridge projects. In recent years, Congress has had to supplement gas tax revenues by also appropriating some general funds for transportation purposes in order to meet transportation infrastructure needs.

As one analyst has pointed out, however, political demands for budget cuts and resistance to raising taxes greatly complicate the challenge of generating sufficient revenues to provide strong support for infrastructure renewal. A major newspaper noted in 2011 that a national advocacy group had called for ending the federal gas tax. In July 2011, the Chair of the House Transportation and Infrastructure Committee introduced a

¹¹ See http://www.fhwa.dot.gov/pgc/.

¹² See Ben Goad, Transportation: Congress Passes Two-Year Highway Bill, PRESS-ENTERPRISE, June 29, 2012, http://www.pe.com/local-news/politics/ben-goad-

headlines/20120629-transportation-congress-passes-two-year-highway-bill.ece, last accessed Sept. 7, 2013; and Keith Laing, Highway Bill Negotiators Like Ike—The Hill's Transportation Report,

http://thehill.com/blogs/transportation-report/highways-bridges-and-roads-/235885-highway-bill-negotiators-like-ike, last accessed Sept. 7, 2013. See also articles listed in Section 1, note 25, infra.

¹³ Government Shutdown Averted; Transportation Suffers Significant Spending Cuts, Weekly Transportation Report, AASHTO JOURNAL, Apr. 15, 2011; see http://www.aashtojournal.org/Pages/041511appropriations. aspx, last accessed on Sept. 7, 2013.

¹⁴ Editorial, The Clear Case for the Gas Tax—Without It, the Highway System Would Crumble Further and the Economy Would Suffer, N.Y. TIMES, Aug. 16, 2011, at A20, available at http://www.nytimes.com/2011/08/16/opinion/the-clear-case-for-the-gas-tax.html.

¹⁵ Larry Ehl, Analysis: Looming Big Shifts in Federal Transportation Funding, Transportation Issues Daily, May 26, 2011; see

http://www.transportationissuesdaily.com/analysis-looming-big-shifts-in-federal-transportation-funding/, last accessed on Sept. 7,2013.

¹⁶ Editorial, *The Clear Case for the Gas Tax*, *supra* note 14.

bill to restrict federal transportation funding to the revenues generated by the federal gas tax and other existing highway fees. Neither the proposal to repeal the federal gas tax, nor the proposal to limit federal highway funding to gas tax revenues alone, offered any indication of how the United States might deal with the estimated \$72 billion backlog of bridges needing repair, a figure almost double the size of the \$37 billion Highway Trust Fund, which reflects only the need for bridge repairs and not the need for highway repairs.¹⁷

The issue of how federal surface transportation funding might be allocated by congressional legislation, in ways affecting the use of such federal funding by state DOTs, also became the subject of public debate. One national foundation recommended that expenditures from the Trust Fund for coordination of urban projects by metropolitan planning organizations (MPOs); expenditures for highway and bridge projects currently classified as High Priority Projects, Projects of Regional and National Significance, and the National Corridor Infrastructure Improvement Program; and expenditures for highway congestion mitigation and air quality (CMAQ) projects, transportation enhancements, and scenic byways, as well as roads in national parks and forests, mass transit, Amtrak, high-speed rail, and ferry boats, be reduced or eliminated. The foundation argued that this would allow the reallocation of funding for such purposes to support more capital construction of highways and bridges. It also argued that this would allow the transfer of discretionary control over surface transportation capital funding from the federal government to state governments, which it advocated for policy reasons.18

c. The 2011 "Minibus" Legislation

In mid-November 2011, Congress enacted so-called "minibus" federal budget legislation, H.R. 2112, providing continued funding for highway and bridge construction projects for FY 2012. This legislation renewed federal highway funding for less than 1 year from the date of enactment, and, absent further legislation, left such funding to expire shortly before the 2012 elections. According to one early report, the USDOT budget for FY 2012 as enacted by the "minibus" legislation included significant reductions in funding for highway and bridge projects: a reduction in the nationwide Highway Obligation Limitation from \$41.107 billion in FFY 2011 to \$39.144 billion in FY 2012, a reduction of \$1.963 billion or 4.7 percent from FY 2011; and a reduction in Highway Traffic Safety Grants from about \$620

million in FY 2011 to \$550 million in FY 2012, a reduction of \$69 million or 11.1 percent from FY 2011.²⁰

Contrary to longstanding past practice of allowing authorized but unexpended funds to be carried over from one fiscal year until the next, H.R. 2112 expressly prohibited such carryovers, stating that: "None of the funds appropriated in this Act shall remain available for obligation beyond the current fiscal year, nor may any be transferred to other appropriations, unless expressly so provided herein." H.R. 2112 also expressly rescinded all unobligated balances of funds previously available for programs administered by the FHWA under 22 prior congressional enactments. ²²

The House-Senate Conference Committee Report on H.R. 2112 indicated that H.R. 2112 authorized the Secretary of Transportation, in order to cover FHWA administrative costs, to reallocate for that purpose up to \$16 million from 14 discretionary highway programs, including: Delta Region Transportation Development; Ferry Boats Discretionary Projects; Highways for LIFE Demo Projects; Innovative Bridge Research and Deployment; Interstate Maintenance Discretionary; National Historic Covered Bridge Preservation; National Scenic Byways; Public Lands Highway Discretionary; Railway-Highway Crossings Hazard Elimination in High-Speed Rail Corridors; Transportation, Community, and System Preservation; Truck Parking Pilot Program; Disadvantaged Business Enterprises Services; On-the-Job Training Services; and, Value Pricing Pilot Program.

The Conference Committee Report on H.R. 2112, included this statement regarding highway funding:

The conferees acknowledge this obligation limitation will deplete almost all resources from the Highway Trust Fund by the end of fiscal year 2012, causing the FHWA to begin cash management procedures that may result in States not receiving timely reimbursement of highway construction expenses. Further, without enactment of a new surface transportation authorization bill with large amounts of additional revenues this year, the Highway Trust Fund will be unable to support a highway program

¹⁷ Ehl, *supra* note 15.

¹⁸ Ronald D. Utt, Setting Priorities for Transportation Spending in FY 2011 and FY 2012, Heritage Foundation Web memo no. 3141, Feb. 9, 2011, available at http://www.heritage.org/research/reports/2011/02/setting-priorities-for-transportation-spending-in-fy-2011-and-fy-2012.

¹⁹ The text of H.R. 2112 is available on the Internet at http://www.gpo.gov/fdsys/pkg/BILLS-112hr2112pp/pdf/BILLS-112hr2112pp.pdf, last accessed Sept. 1, 2013.

²⁰ Federal Funds Information for States (FFIS), Jim Martin Table: Latest House and Senate Action on FY 2012, available at http://www.ffis.org/node/2493, last accessed on Sept. 1, 2013; and the referenced table, Major Discretionary and Mandatory Program Funding, available at

http://www.ffis.org/sites/ffis.org/files/public/publications/2011/FY_2011_Final_and_FY_2012_Latest_11_15_11.pdf,

last accessed on Sept. 1, 2013. While the table was prepared prior to enactment of the "minibus" funding legislation, it reflected the spending levels shown in the House-Senate conference report for that legislation issued a few days before the legislation was enacted.

²¹ H.R. 2112, § 403.

 $^{^{22}}$ See text of H.R. 2112 at 304, lines 14 through 24, under the heading "Rescission," expressly rescinding any unobligated funds previously remaining available under Public Laws 91–605, 93–87, 93–643, 94–280, 96–131, 97–424, 98–8, 98–473, 99–190, 100–17, 100–202, 100–457, 101–164, 101–516, 102–143, 102–240, 103–122, 103–331, 106–346, 107–87, 108–7, and 108–199.

in fiscal year 2013. The conferees strongly urge the committees of jurisdiction to enact surface transportation legislation that provides substantial long-term funding to continue the federal-aid highways program.²³

d. Negotiations Toward Further Legislation

Following enactment of the "minibus" legislation in November 2011, various issues reportedly complicated negotiations over a longer-term, more comprehensive federal-aid transportation funding bill. There were significant disputes over how to make up for the \$10 billion to \$14 billion projected annual shortfall in federal motor fuel tax revenues as compared with the projected need for federal-aid funding, and over the content of such legislation.²⁴

²³ See Conference Report on H.R. 2112, Consolidated and Further Continuing Appropriations Act, 2012, Cong. Rec., H7433 et seq., at H7546, Nov. 14, 2011.

²⁴ Democratic legislators reportedly sought to include \$1.4 billion in funding in the legislation for the Environmental Protection Agency's (EPA) Land and Water Conservation Fund. A bill passed by the Senate also included two additional provisions sought by Democrats: one shifting more federal-paid funding to repairing existing highways rather than building new ones, and another establishing a new coordinated policy for linking freight and ports. Republican legislators pursued provisions to streamline the environmental review process for transportation projects. They also sought to provide states with greater flexibility to redeploy funding from highway safety improvement projects, CMAQ projects, and transportation enhancement projects, including highway beautification, bike path, and sidewalk lighting projects, to be used instead for regular highway projects considered to have higher priority. Republican legislators further sought to include certain nontransportation provisions in the legislation, including federal approval of the Keystone XL oil pipeline project, notwithstanding unresolved environmental issues, and limitation of the EPA's authority to regulate coal ash generated by coal-fired electric generating facilities. See Ben Goad and Keith Laing, supra note 12; and see Ted Barrett & Deirdre Walsh, Congress Strikes Tentative Deal on Highway Bill, Sources Say, CNN.com, June 28, 2012,

http://www.cnn.com/2012/06/27/politics/congress-

transportation-bill/index.html; Corey Boles, Congress Approves Student Loan, Highway Bill, MarketWatch.com, June 29, 2012, http://www.marketwatch.com/story/congress-approves-student-loan-highway-bill-2012-06-29;

Meredith Shiner, House, Senate Clear Highway Bill Deal, RollCall.com, June 29, 2012,

http://www.rollcall.com/new/House-Senate-Clear-

Highway_Bill-Deal-215868-1.html?pos=hfxt; Tom Cohen, Congress OKs Highway Funds/Student Loan Bill, CNN.com, June 29, 2012,

http://www.cnn.com/2012/06/29/politics/congress-highway-bill/index.html; Ezra Klein, Suzy Khimm, Sarah Kliff & Brad Plumer, Highway Bill Showdown: Five Things to Know, WASHINGTON POST, June 29, 2012, http://www.washington post.com/blogs/ezra-klein/wp/2012/06/29/highway-bill-showdown-five-things-to-know/; Ed O'Keefe & Rosalind S. Helderman, Student Loan Extension, Highway Funding Approved by Congress, WASHINGTON POST, June 29, 2012, http://www.washingtonpost.com/politics/student-loan-extension-highway-funding-approved-by-

2. 2012: Moving Ahead for Progress in the 21st Century Act

a. Enactment and Legislative Comments

As an advanced draft of the update to this volume was under review, Congress passed on June 29, 2012, and President Obama signed into law on July 6, 2012, a new federal surface transportation statute, to be known as the Moving Ahead for Progress in the 21st Century Act (MAP-21), P.L. 112-141, providing \$105 billion in federal-aid funding for 2 years and 3 months, from June 29, 2012 until the end of FY 2014 in September 2014.²⁵

congress/2012/06/29/gJQAk98PCW_story.html?hpiud=z3; Corey Boles, Congress Passes Bill on Highways, Student Loans and Flood Insurance, WALL STREET J., June 29, 2012, search http://online.wsj.com/article/SB10001424052702303649504577 496761419420828.html; Frank Thorp, Congress Sends Student Loan and Transportation Package to Obama, MSNBC.com, June 29, 2012,

http://firstread.msnbc.msn.com/_news/2012/06/29/12483144-congress-sends-student-loan-and-transportation-package-to-obama?lite; Nathan Hurst, Bipartisan Deals Shape Highway Bill, CONG. Q.,

http://public.cq.com/docs/news/news-000004114526.html; all last accessed on Sept., 2013.

Negotiations between the House and Senate were reportedly further complicated when major public-policy advocacy organizations strongly opposed the legislation, and directly warned legislators that they would hold any votes in favor of the legislation against the legislators in the November 2012 election. A reporter quoted Rep. Steve LaTourette (R-Ohio), described as a key ally of House Speaker John Boehner, as saying that "One of the biggest problems has been that conservative think tanks have prevented Mr. Boehner from getting 218 votes for a piece of legislation." See Keith Laing, Conservative Groups Rev Up Opposition to Highway Bill-The Hill's Transportation Report, June 29, 2012,

http://thehill.com/blogs/transportation-report/highways-bridges-and-roads/235533-conservative-groups-rev-up-opposition-to-highway-bill; last accessed on Sept. 7, 2013. As that article indicates, both the Heritage Foundation and the Club for Growth issued public statements on the day before Congress voted on the final legislation, indicating that they would hold any votes supporting the legislation against candidates in the 2012 elections.

Despite these conflicts and pressures, House and Senate Negotiators, led by House Transportation and Infrastructure Chairman John L. Mica (R.-Fla.) and Senate Environment and Public Works Chairwoman Barbara Boxer (D-Cal.), who also chaired the House-Senate Conference Committee, were finally able to reach agreement on a bill, almost 3 years after SAFETEA-LU had reached its original expiration date. See Hurst, op. cit.

²⁵ MAP-21, Pub L. No. 141, 126 Stat. 104 (2012). The version passed by both houses of Congress and signed into law by the President was H.R. 4348, the final House bill embodying the agreement reached by the House-Senate Conference Committee. For the text of the legislation as enacted, see http://www.gpo.gov/fdsys/pkg/BILLS-112hr4348enr/pdf/BILLS-112hr4348enr.pdf, last accessed on Sept. 8, 2013. For the House-Senate Conference Committee Report on the legislation,

The legislation, H.R. 4348, passed the House by a vote of 373–52, and the Senate by a vote of 74–19. According to news reports, a majority of both parties' lawmakers supported the legislation, and every Democratic member of the House who voted supported it.²⁶

Both news reports and the Conference Committee Report made it clear that the final bill's provisions reflected a political compromise carefully negotiated between the House and Senate. As enacted, the legislation provided significant funding for transportation projects beyond projected federal motor-fuel tax revenues. It reportedly provided this funding by allowing U.S. companies to reduce their contributions to private-sector defined-benefit workplace pension plans, which effectively increased Federal Pension Benefit Guaranty Corporation taxes on such pension plans; and by allocating 80 percent of any fines recovered from the 2010 Deepwater Horizon oil spill to be distributed to Gulf states to help cover the costs of reconstruction projects.²⁷

House Speaker John Boehner thanked both parties for working to resolve disagreements on how to pay for the legislation, while commenting that the bill was "far from perfect." Senate Majority Leader Harry Reid was quoted as saying that the legislation proves that when both parties work together, "we can do a lot to move our economy forward." While House Transportation and Infrastructure Chairman John R. Mica (R-Fla.) had previously sought legislation that would have provided longer and more extensive federal-aid funding, he acknowledged that "with the financial condition of the United States, it's the best we could do right now."28 One prominent construction industry executive commented that while the provisions streamlining the environmental approval of federal-aid transportation projects were welcome, the two years of funding provided was still too short to give states sufficient time to plan major infrastructure projects. He was quoted by media as saying that "you have a transportation bill that has a 2-year horizon and it takes far longer than that to plan a major transportation infrastructure project."29

b. FHWA Summary of MAP-21 Legislation

Within a month after the President's approval of MAP-21, FHWA posted a summary of its provisions on the FHWA Web site, at http://www.fhwa.dot.gov/map21/summaryinfo.cfm.³⁰ Readers may find this summary useful, since the full text of this legislation is more than 700 pages long. Aside from the provisions providing continued funding under SAFETEA-LU for the remainder of FY 2012, the new provisions of the bill will go into effect on October 5, 2012. While detailed analysis of MAP-21 will require close examination both of the Conference Committee's report³¹ and the full text of the legislation the following summary is provided as an introduction to its provisions.

From FHWA's perspective, MAP-21 strengthens America's highways by expanding the National Highway System (NHS) to include principal arterials, and by establishing a new program, the National Highway Performance Program, to preserve and improve important highways. It establishes a performance-based program to improve decision-making about transportation investments through performance-based planning and programming. MAP-21 creates jobs and supports economic growth by authorizing \$82 billion in FY 2013 and 2014, increasing TIFIA funding, providing other surface transportation funding, and improving freight movement. It supports USDOT's safety agenda by continuing the Highway Safety Improvement Program (HSIP) and other safety efforts, including motor carrier safety inspection programs. MAP-21 streamlines federal highway transportation programs by consolidating the program structure into a smaller number of core programs, eliminating smaller programs while generally continuing the eligibilities involved through the core programs. It also accelerates project delivery and promotes innovation in the development of projects through changes in the planning and environmental review process.³²

MAP-21 establishes six core highway formula programs, incorporating activities carried out under some previously existing formula programs. The six new core programs are the National Highway Performance Program (NPP), Surface Transportation Program (STP), CMAQ, HSIP, Railway-Highway Crossings (involving a funding set-aside from HSIP), and Metropolitan Planning. In addition, MAP-21 creates two new but non-core formula programs, the Construction of Ferry Boats and Ferry Terminal Facilities Program and the Transportation Alternatives (TA) Program; creates a new discretionary program, the Tribal High Priority Projects (THPP) Program; and continues five other preexisting

see Joint Explanatory Statement of the Committee of the Conference, June 29, 2012, at 1,

http://docs.house.gov/billsthisweek/20120625/CRPT-112hrpt-HR4348.pdf, last accessed on Sept. 8, 2013. For links to both in alternate formats, $see\ also$

 $[\]label{lem:http://www.fhwa.dot.gov/map21/legislation.cfm, last accessed July 25, 2012.$

 $^{^{26}}$ See Boles, Thorp, O'Keefe & Helderman, and Shiner, supra note 24.

²⁷ See Boles, supra note 24. As one article pointed out, this was a temporary stop-gap solution under which Congress and federal and state transportation agencies will once again be confronted by the need to address the gap between federal motor fuel tax revenues and highway and bridge capital program needs in 2014. See Klein, Khimm, Kliff and Plumer, supra note 24.

²⁸ O'Keefe & Helderman, supra note 24.

²⁹ Boles, supra note 24.

³⁰ FHWA, Moving Ahead for Progress in the 21st Century Act (MAP-21), A Summary of Highway Provisions, July 17, 2012, http://www.fhwa.dot.gov/map21/summaryinfo.cfm, last accessed on Sept. 7, 2013.

³¹ Joint Explanatory Statement of the Committee of the Conference, June 29, 2012, http://docs.house.gov/billsthisweek/20120625/HR4348crJES.

pdf, last accessed on Sept. 7, 2013. 32 FHWA, supra note 30.

discretionary programs while eliminating at least a dozen other preexisting discretionary programs, but allowing previous eligibilities from the THPP Program; and continues five other preexisting discretionary programs, while eliminating at least a dozen other preexisting discretionary programs, but allowing many of the eligibilities from those previous programs to continue under the core programs.³³

FHWA describes the transportation investments made possible by MAP-21. MAP-21 extends SAFETEA-LU funding for the remainder of FY 2012. It then authorizes FY 2013 and 2014 funding at 2012 levels, with adjustment for inflation: \$40.4 billion from the Highway Trust Fund for FY 2013, and \$41.0 billion for FY 2014. MAP-21 provides FHWA with separate authorizations of \$454 million for FY 2013 and \$440 million for FY 2014, to support administrative costs; but designates more than \$30 million per year of those funds for other purposes specified in the legislation. FHWA also indicates that, under MAP-21, there will be a new approach to administering funding formulas, as detailed in the summary on its Web site. ³⁴

i. Impact Upon TIFIA Funding.—FHWA's summary indicates that MAP-21 significantly increases the funding available for federal assistance under the Transportation Infrastructure Financing and Innovation Act (TIFIA) program of federal credit assistance to eligible projects. It makes \$750 million in TIFIA subsidy authorizations available for FY 2013, and \$1 billion for FY 2014, with each \$1 billion in subsidies supporting roughly \$10 billion in actual lending capacity. MAP-21 also includes a 10 percent TIFIA set-aside for rural projects, increases the share of project costs eligible for TIFIA funding, and sets up a rolling application process.³⁵

ii. Impact Upon Tolling.—FHWA indicates that MAP-21 amends the previously existing 23 U.S.C. §129, governing state or other imposition of tolls upon highways constructed or improved using federal-aid funds. MAP-21 removes the requirement for execution of an agreement with USDOT prior to imposing tolls under the mainstream tolling programs, although the agreement requirement continues in effect for tolling pilot project programs. The legislation also mainstreams the imposition of tolls upon new Interstate highways and adds lanes on existing Interstates. It continues both the Value Pricing Pilot Program and the Interstate System Reconstruction and Rehabilitation Pilot Program. MAP-21 also requires that all federal-aid highway toll facilities implement technologies by October 1, 2016, for the interoperability of electronic toll collection.³⁶

iii.—Impacts Upon the Highway Trust Fund.—FHWA indicates that MAP-21 extends the imposition of federal motor-fuel taxes, the primary source of revenue for the Highway Trust Fund, through September 30,

2016 (2 years after the end of the FY 2014 funding authorized by the legislation). It also notes, however, that motor-fuel tax revenues are insufficient to support the Highway Trust Fund at the levels needed to support authorized expenditures, and that MAP-21 thus also includes some transfers from the General Fund and the Leaking Underground Storage Tank Trust Fund to bring Highway Trust Fund revenues up to the levels necessary for the FY 2013 and 2014 surface transportation programs. It also notes that MAP-21 continues to provide funding of up to \$10 million per year from FHWA administrative funds to provide ongoing support for FHWA's Highway Use Tax Evasion Program.³⁷

iv. Accelerating Project Delivery.—MAP-21 continues and enhances the existing statewide and metropolitan transportation planning processes. It requires both a long-range plan and a short-term transportation improvement program (TIP). The legislation also ties the planning process to transportation system performance criteria established elsewhere in the legislation.³⁸

According to FHWA, MAP-21 also includes various provisions to improve efficiency, effectiveness, and accountability in transportation funding, planning, design, and construction and to accelerate project delivery. In particular, MAP-21 expands authority for the use of categorical exclusions from National Environmental Policy Act (NEPA) environmental impact statement requirements to cover projects to reconstruct highways damaged in disaster emergencies, projects receiving only limited federal aid, and multi-modal projects. MAP-21 also provides for earlier interagency coordination during the environmental review process, greater linkage between planning and environmental review activities, consolidation of environmental documents, and use of a programmatic approach to environmental reviews whenever possible. Further, the legislation makes it easier for agencies to preserve or acquire rights of way prior to completion of the NEPA environmental review process.39

v. Implementation of Performance Management Measures—FHWA indicates that perhaps the most important aspect of the MAP-21 legislation is its requirement for federal-aid transportation programs to transition into performance-oriented and outcome-based programs. MAP-21 establishes national performance goals in the following areas: safety, infrastructure condition, congestion reduction, system reliability, freight movement and economic vitality, environmental sustainability, and reduced delays in project delivery. In consultation with state DOTs, MPOs, and other stakeholders, the U.S. Secretary of Transportation will establish performance measures for pavement conditions. He will also establish performance measures for the Interstate and NHS highway systems, bridge conditions, injuries and fatalities, traffic congestion, on-road mobile-source emissions, and freight movement on the

 $^{^{33}}$ *Id* .

 $^{^{34}}$ Id.

 $^{^{35}}$ *Id* .

 $^{^{36}}$ Id.

 $^{^{37}}$ Id.

 $^{^{38}}$ *Id* .

 $^{^{39}}$ Id.

Interstate system. States and MPOs will then be required to set their own performance targets in support of those measures, incorporate such targets in their planning processes, and show how their transportation programs and project selections will help achieve those targets. If states fail to maintain minimum standards for Interstate pavement and NHS bridge conditions, or to make significant progress toward their state plan targets, they will be required to undertake corrective measures.⁴⁰

vi. Description of New Core Programs-...FHWA devotes a fair amount of time to describing specific details, including new performance-oriented requirements, of the new core surface transportation programs created or continued by MAP-21. These include the National Highway Performance Program (NHPP), authorized at an average of \$21.8 billion per year; Surface Transportation Program (STP), providing an annual average of \$10 billion in flexible funding; HSIP, with average annual funding of \$2.4 billion; the continued CMAQ Program, with an average annual funding level of \$3.3 billion; the TA Program, which provides for a variety of alternative transportation projects previously covered under separately funded programs; and the Federal Lands and Tribal Transportation Program. FHWA also provides briefer treatment of other, non-core programs, including Emergency Relief, Workforce Development and Disadvantaged Business Enterprise (DBE), Bridge and Tunnel Inspection, Projects of National and Regional Significance, Construction of Ferry Boats and Ferry Terminal Facilities, and the Appalachian Development Highway System. Finally, it discusses a variety of research, technology deployment, training, and education programs. While these will not be discussed in detail here, readers with specific interests in any of these programs are referred to FHWA's Web site.⁴¹

3. Impact of Long-Term Funding Uncertainties Upon States

While the enactment of a new 2-year federal surface transportation funding bill may relieve some of the uncertainty of future federal funding for surface transportation, this legislation will, at least according to its current terms, be in effect for only 2 years, which is considerably less than it has taken in the recent past to plan a typical major transportation project. The long-term uncertainty that this creates may well have major impacts upon state DOTs, many of which also face state funding issues. Investments in transportation infrastructure have played a major role in state budgets over the past several years. As indicated in Table 1, a review of data from FHWA's publicly available Highway Statistic Series of annual reports 42 on federal-aid highway

funding, non-federal-aid highway expenditures, and total highway construction expenditures between 2005 and 2008 shows that eight of our country's largest states have made extensive investments in transportation infrastructure during that period.

Table 1. Combined Federal Aid (FA) & Non- Federal Aid Highway Expenditures for Eight Selected States, 2005–2008		
		Total FA + Non-FA Hwy \$\$
Rank		2005–08
1	Texas	\$28.3 billion
2	Florida	\$19.6 billion
3	California	\$17.1 billion
4	New York	\$11.9 billion
5	Illinois	\$11.5 billion
6	Pennsylvania	\$9.7 billion
7	Michigan	\$9.6 billion
8	North	\$7.7 billion

Carolina

Due to changes in economic conditions since that period, however, states may now face much greater challenges in generating sufficient resources to continue making transportation infrastructure investments at this level. During the preparation of this update, the authors researched the situations confronting several state DOTs, and interviewed officials in some of those agencies. Given the geographic and economic diversity of the United States, it is not surprising that the results varied considerably from state to state. The results clearly indicated, however, that at least some states with large populations will face major transportation capital funding shortfalls if federal funding legislation providing federal motor fuel tax revenue to the states is not renewed or expanded.

a. Texas

Based on FHWA data, Texas expended approximately \$28.3 billion in combined federal-aid and nonfederal-aid highway projects between 2005 and 2008, giving it the largest state highway capital construction program in the United States during that period. This almost certainly made a positive contribution to the state's economic development and performance during that period.

information/statistics.cfm. The data presented and discussed in this report are drawn principally from Table SF-12B of the FHWA Highway Statistics reports for the years 2005 through 2008, for highway construction expenditure data, and from Table SDF of the FHWA Highway Statistics reports for the years 2005 through 2009, for motor fuel tax revenue collection and usage. Construction expenditure data are not yet available for 2009 and subsequent years.

⁴⁰ Id.

 $^{^{41}}$ Id.

⁴² FHWA's Highway Statistic Series of annual reports, including but not limited to reports on Highway Finance Data and Information and on the Motor Fuel and Highway Trust Fund, are available at http://www.fhwa.dot.gov/policy

There are strong indications, however, that Texas may not be able to continue transportation investments at this pace in the future. Much of that funding total came from FHWA federal-aid funding, which for reasons indicated above is currently in doubt for future years. While Texas DOT receives motor fuel tax revenues, it does not receive any state general-fund revenues. With both automobiles and trucks becoming more fuel efficient, motor fuel tax revenues are projected to decline in future years. Texas has also used debt funding to cover the state match for federal-aid project funding in past years, and its annual debt-service costs reportedly may soon exceed the annual amount the state can afford to spend on new projects. The Chairs of both the Texas House Transportation Committee and the Texas Senate Transportation and Homeland Security Committee have been publicly quoted as characterizing the transportation funding situation now confronting Texas as a "crisis."43

The Center for Transportation Research at the University of Texas predicts that, over the next 20 years, the state will need to expend \$315 billion on the state's highways and bridges in order to keep traffic conditions at current levels, but will generate projected motor fuel tax revenue of only \$160 billion during the same period, resulting in a \$155 billion shortfall in transportation funding over the next 20 years in that state alone. News reports have quoted both the current and former Chairs of the Texas House Transportation Committee as indicating that, with the state facing an overall budget crisis, transportation needs are unlikely to receive immediate attention. They both express hope that the Texas Legislature may be able to devote more attention to transportation funding needs during its next session, in 2013.44

b. Florida

Based on FHWA data, Florida expended approximately \$19.6 billion in combined federal-aid and non-federal-aid highway projects between 2005 and 2008, giving it the second largest state highway capital construction program in the United States during that period.

Like other states, however, Florida faces pressing fiscal issues on many fronts. In 2011, the Florida State Legislature diverted \$150 million from gas tax revenues to support education spending, which affected the funding of an estimated \$334 million in highway projects. 45

Planning to use highway and bridge construction to help spur economic recovery, and facing inadequate gas tax revenue and the diversion of gas tax revenue to support nontransportation expenditures, Florida DOT is now requiring contractors to obtain private-sector financing for many of its projects, and increasing the use of tolls to finance highway and bridge projects.46 As of August 2011, Florida DOT has reportedly let 11 projects totaling about \$900 million that require contractor financing. On one such project, the Interstate 4 / Selmon Expressway project in Tampa, the contractor is reportedly financing \$180 million of the \$394 million cost of the project. 47 Florida DOT has also begun increasing capacity on some highways by adding toll lanes, including a project on I-95 in Miami-Dade County. Florida DOT reportedly plans to pursue additional toll-funded capacity expansion projects on I-4 in Orlando, I-75 in Tampa and south Florida, I-95 in Jacksonville, and I-110 in the Florida panhandle.48

c. New York

Based on FHWA data, New York State expended approximately \$11.9 billion in combined federal-aid and non-federal-aid highway projects between 2005 and 2008, giving it the fourth largest state highway capital construction program in the United States during that period.

Historically, the construction of transportation infrastructure has been essential to economic growth. New York State now faces significant challenges, however, in obtaining sufficient funding to support ongoing transportation infrastructure needs. Of the state's roughly 17,300 bridges, 36 percent have condition ratings under 5. New York's Office of the State Comptroller reportedly estimates that the state will need \$250 billion to maintain its transportation, sewer, and water systems over the next 20 years. Even including projected levels of federal aid, the state will only have about \$170 billion in infrastructure funding during the same period, leaving a projected shortfall of \$80 billion in infrastructure funding during the next 2 decades. 49

There are a variety of reasons for these transportation funding challenges. New York State Department of Transportation (NYSDOT) officials note that while current federal law requires each state receiving federal-aid funding to prepare a STIP, a multi-year plan for the state's surface transportation capital program, the preparation of the STIP is increasingly complicated by

⁴³ Gary Scharrer, State Highway Fund Crisis: Are We There Yet?, HOUSTON CHRONICLE online edition, http://www.chron.com/disp/story.mpl/metropolitan/7404396.ht ml, last accessed on Sept. 7, 2013.

⁴⁴ Nolan Hicks, *Texas Highway System Nearly Running on Empty*, HOUSTON CHRONICLE online edition, http://www.chron.com/disp/story.mpl/metropolitan/7462915. html, last accessed on Sept. 7, 2013.

 $^{^{45}}$ Id.

⁴⁶ Scott Judy, Low on Gas Taxes, Florida Accelerates Contractor Financing, Engineering News-Record.com, Aug. 16, 2011.

http://enr.construction.com/infrastructure/transportation, subscription service, last accessed Sept.~7,~2013.

 $^{^{47}}$ Id.

 $^{^{48}}$ Id.

⁴⁹ Joseph Spector & Tim Henderson, *Hard Rides, Hefty Costs: Many of State's Bridges are in Poor Shape—But So are Budgets*, Albany, N.Y., TIMES UNION, Sept. 26, 2011, at A-1.

multiple factors.⁵⁰ Seemingly routine choices by fiscal staff about allocation of available program funding can have significant consequences caused by differences between federal and state laws governing projects and the resultant costs of compliance with such laws. Examples of such differing requirements, which can dramatically increase costs, include, but are not limited to, NEPA and New York State's State Environmental Quality Review Act (SEQRA), Federal DBE requirements and state Minority and Women's Business En-(M/WBE) requirements, and Davis/Bacon and state labor law prevailing rate wage requirements. Complying with such requirements can account for as much as 30 percent of the cost of a federal-aid project. Federal requirements for Internet posting of detailed data on transportation projects, imposed by Congress in connection with American Recovery and Reinvestment Act (ARRA) stimulus funding, are also time-consuming and expensive with which to comply.⁵¹

The cumulative impact of these transportation funding challenges is significant. NYSDOT is responsible for a transportation system including more than 15,000 centerline miles of Interstate and state highways and approximately 17,300 bridges. When NYSDOT was created in 1967, it had about 15,000 employees to design, build, operate, and maintain those facilities. As of 2011, it has about 8,700 employees, less than 60 percent of its original staff. The impact of funding challenges upon the transportation construction industry has also been substantial, with the construction trades facing unemployment of 25 to 30 percent in New York State as of the summer of 2011.

After a number of years of considering but not adopting legislative proposals, New York State enacted legislation in 2011 authorizing NYSDOT, the New York State Thruway Authority, the New York State Bridge Authority, and certain other state agencies to use public–private partnerships (PPP) or design-build procedures for any projects over \$1.25 million.⁵² While innovative methods of transportation capital funding such as PPP or the creation of a National Infrastructure Bank are definitely worth further consideration, there may be some risk that they might not provide a comprehensive solution to existing funding problems.

d. Maryland

Like Florida DOT, the Maryland Transportation Authority is reportedly increasing highway and bridge tolls to offset declining gas tax revenues. For the first time since the 1970s, the Authority voted in September 2011, effective November 2011, to increase tolls on the Chesapeake Bay Bridge. The Authority also reportedly plans to use toll funding for a \$1 billion project to con-

struct express toll lanes on I-95 near Baltimore, among other projects.⁵³ The toll increases appear likely to impose added costs upon interstate commerce; the Maryland Motor Truck Association reportedly estimates, for example, that truckers who transport shipping containers from the Port of Baltimore through the Fort McHenry Tunnel will see toll increases from the current \$12 each way to \$18 each way starting in January 2012 and \$24 each way starting in July 2013, totaling an estimated \$3,000 per truck per year in increased operating costs.⁵⁴

e. Missouri

Faced with severe budget challenges, Missouri DOT has reportedly made major cutbacks in its highway capital construction program, its agency staffing, and its maintenance equipment. From 2006 to 2011, Missouri's annual highway construction program reportedly averaged \$1.2 billion a year. In June 2011, however, saying that "We are facing a transportation funding crisis in Missouri," Missouri DOT's Director presented the Missouri Highways and Transportation Commission with a plan proposing a highway construction program of about \$600 million a year, or roughly half the prior annual average, for the next 5 years. The plan also proposed consolidating several existing divisions within Missouri DOT's Central Office. While Missouri DOT's existing structure of 10 regional offices had been in place almost unchanged for almost 90 years, since 1922, the plan further proposed cutting the agency's number of regional offices from 10 to 7, closing 135 Missouri DOT field facilities, and selling more than 740 trucks and other pieces of construction equipment from Missouri DOT's existing maintenance fleet. Along with these organizational steps, the plan proposed reducing the size of Missouri DOT's workforce by 1,200 employees. While the Director reportedly expressed hope that much of this could be accomplished through attrition and transfers, he acknowledged that layoffs might also be necessary.55 The Missouri Highways and Transportation Commission reportedly adopted the plan with only minor revisions in June 2011.⁵⁶

⁵⁰ Group interview by Peter Shawhan with NYSDOT officials Ronald Epstein, Owen Shevlin, David Roth, Kyle Wood, Robert Crowley, and Michael McDermott in Albany, N.Y., June 27, 2011.

 $^{^{51}}$ *Id* .

 $^{^{52}}$ See ch. 52 of the New York State Laws of 2011.

⁵³ Katherine Shaver, Tolls Increase on Maryland Roads, Bridges and Tunnels, WASH. POST, Sept. 22, 2011, http://www.washingtonpost.com/local/commuting/tolls-increase-on-md-roads-bridges-and-

tunnels/2011/09/22/gIQAHwJUoK_story.html, last accessed on Sept. 7, 2013.

 $^{^{54}}$ Id.

⁵⁵ MoDOT Transportation Funding Crisis, Kansas City infoZine, May 5, 2011, available at http://www.infozine.com/news/stories/op/storiesView/sid/47400/, last accessed on Sept. 7, 2013.

⁵⁶ MoDOT Goes Small, Kansas City infoZine, June 9, 2011, available at http://www.infozine.com/news/stories/op/stories View/sid/47778/, last accessed on Sept. 7, 2013.

f. Kansas

During 2010, the Governor of Kansas cut \$257 million from the State Highway Fund. In response, the Secretary of Kansas DOT announced in March 2010 that he was suspending \$86 million, or 65 percent, of the \$133 million in state-funded projects that Kansa DOT had planned to have under contract for the remainder of the state's fiscal year. He pointed to federal funding for \$112 million in ARRA stimulus projects as "the saving grace" that allowed the DOT's construction program to continue, at least during the summer of 2010.⁵⁷

B. METHODS OF CONTRACTING FOR TRANSPORTATION CONSTRUCTION

1. Competitive Bidding—The Design-Bid-Build Method

State and federal law nearly always requires that public works projects be procured through a competitive selection process.⁵⁸ Most transportation construction projects have traditionally used the "design-bid-build" method, or competitive sealed bidding. Using this method, the transportation agency designs the project, either with its own staff or through a consultant, and prepares the project plans and specifications. The agency then advertises the project for bids, and selects the lowest responsible bidder to build the project. Some state transportation agencies have obtained legislative authority to use other methods such as design-build and PPP; however, most agencies still use the design-bid-build method for most projects.

The 2000 Model Procurement Code for State and Local Governments includes processes for competitive sealed bidding as well as competitive sealed proposals, which are used for design-build and other alternative contracting methods.⁵⁹ The Model Code no longer states

a statutory preference for competitive sealed bidding, although it is still the default source selection method. 60

Procedures for selection of contractors to construct, maintain, improve, and repair public highways are based on state statutes and administrative rules. 161 These rules have no common law antecedents, and thus they constitute a set of positive policies and requirements that distinguish the conduct of public officials from the practices of those in private business. Two objectives underlie the development of most of today's laws and regulations requiring competitive bidding—the prevention of favoritism in spending public funds, and the stimulation of competition in the construction industry. 162

The importance of complying with statutory bidding procedures is illustrated in cases in which governments have attempted to use the public contracting process to help achieve policy and program goals, especially in connection with social and economic issues and public safety. When an agency modifies its competitive bidding procedures to accommodate extraneous public interests, disappointed bidders may challenge the award as violating bidding requirements.63 This occurred when a transportation authority awarded a contract to paint subway stations to a nonprofit corporation engaged in rehabilitating the work habits of persons with poor employment records resulting from alcoholism, drug addiction, imprisonment, or "social disability." The organization's clients came from governmental and quasi-public sources, and its program implemented the state's social services laws. The painter's union successfully challenged the transportation authority's award. The court held that neither the good intentions of the contracting agency nor the laudable work of the contractor could overcome the statutory requirement for competitive bidding:

tory of the Model Procurement Code, 25 Pub. Cont. L. J. 149–72 (1996) (written by chairman of ABA committee that drafted 1979 Model Code).

⁵⁷ Transportation Secretary Miller Responds to KDOT Budget Cuts, Kansas DOT news release, Mar. 5, 2010, available at http://www.ksdot.org/offtransinfo/pressrel2010.asp, last accessed on Sept. 7, 2013.

⁵⁸ Portions of this section are derived from Dr. Ross D. Netherton, *Competitive Bidding and Award of Highway Construction Contracts*, Transportation Research Board, The National Academies, Washington, D.C., 1976, included in the first edition of SELECTED STUDIES IN HIGHWAY LAW, vol. 3., at 1175 or supplemented *id.* at 1214–51 (1988).

⁵⁹ AMERICAN BAR ASSOCIATION, MODEL PROCUREMENT CODE FOR STATE AND LOCAL GOVERNMENTS (hereinafter "ABA Model Code") § 3-202 (2000). A number of states have enacted some variation of the Model Code as their state procurement code. In those states, the commentary contained in each section of the Model Code may be useful as legislative history. In addition, the ABA regularly publishes compilations of cases decided under state law in states that have enacted the Model Code. For further discussion of the development of the 1979 Model Code, see C. Cushman, The ABA Model Procurement Code: Implementation, Evolution, and Crisis of Survival, 25 PUB. Cont. L.J. 173–98 (1996); and F.T. vom Baur, A Personal His-

⁶⁰ ABA Model Code, supra note 59, at xiii.

⁶¹ Aschen-Gardner, Inc. v. Superior Court In and For County of Maricopa, 173 Ariz. 48, 839 P.2d 1093, 1095–96 (1992) (competitive bidding for public works projects is required only when mandated by statute); see also Smith v. Intergovernmental Solid Waste Disposal Ass'n, 178 Ill. Dec. 860, 605 N.E.2d 654, 664, 239 Ill. App. 3d 123 (1992) (in absence of statute requiring it, competitive bidding is not necessary for public agency to enter into valid contract); but see City of Philadelphia v. Commonwealth of Pa. Dep't of Envtl. Resources, 133 Pa. Commw. 565 577 A.2d 225, 228 (1990).

⁶² Computer Shoppe v. State, 780 S.W.2d 729, 737 (Tenn. App. 1989) (public bidding statutes are intended to promote public interest by aiding government in procuring best work or materials for lowest practical price, providing bidders with fair forum for competing for government contracts, and protecting public from its officials' self-dealing, extravagance, and favoritism).

⁶³ District Council No. 9, Int'l Bhd. of Painters & Allied Trades v. Metropolitan Transp. Auth., 115 Misc. 2d 810, 454 N.Y.S.2d 663, 667 (1982).

The intent of the bidding statute is to prevent favoritism, improvidence, extravagance, fraud and corruption and to promote economy in public administration and honesty, fidelity and good morality in administrative officers. This policy is so strong that a violation of [it]...renders a public works contract void.

Thus, the questions become whether...the [transportation authority] has the right to make an exception for contracts, that clearly contemplate public works, when the contractor is an organization that is itself performing a valuable service in the public interest....As well motivated as this sentiment may be, the statute does not support [the authority's action]. 64

Even though avoidance of favoritism and fraud is important, it is not the most important purpose of public bidding rules. The primary objective has always been to obtain a full and fair return for an expenditure of public funds. ⁶⁵ This may be accomplished by extending invitations for public contract work on an open and equal basis to all persons who are able and willing to perform the work. Through effectively supervised competition among the parties, the public is assured that there will be a real and honest cost basis for the work desired. ⁶⁶

Therefore, competitive bidding requirements serve multiple purposes, and statements of these purposes by the courts have varied in emphasis. An illustrative list of the major objectives of competitive bidding is found in *Wester v. Belote*:

[T]o protect the public against collusive contracts; to secure fair competition upon equal terms to all bidders; to remove, not only collusion, but temptation for collusion and opportunity for gain at public expense; to close all avenues to favoritism and fraud in its various forms; to secure the best values [for the public] at the lowest possible expense; and to afford an equal advantage to all desiring to do business with the public authorities, by affording an opportunity for an exact comparison of bids.⁶⁷

a. The Essential Principles of Competitive Bidding

i. The Form of Competitive Bidding Rules.—An agency satisfies the objectives of competitive bidding when it follows uniform procedures relating to: 1) public advertisement to bidders inviting the submission of proposals; 2) preparation of plans, specifications, and related information about the work and the location where those materials may be obtained by prospective bidders; 3) formal submission of proposals to the contracting agency, together with the deposit of financial security guaranteeing that the bidder will accept the award of a contract if it is the lowest responsible bidder; 4) consideration of proposals under uniform criteria, and 5) award of contracts to lowest responsible bidders.

Any effort to fully describe the law relating to competitive bidding and award of contracts must take into account statutes, administrative regulations, and the informally followed practices of the contracting agency. Patterns regarding the mix of statutory and administrative elements in the law vary from state to state. Connecticut's statute illustrates an unusually broad delegation of procedural rulemaking authority to administrative officials:

The commissioner may, at any time, call for bids to construct, alter, reconstruct, improve, relocate, widen or change the grade of sections of state highways or bridges.

All bids shall be submitted on forms provided by the commissioner and shall comply with the rules and regulations provided in the specifications....⁶⁸

In contrast, other states leave certain aspects of bidding to administrative judgment, and specify other aspects in statutes. Such variations in the form of competitive bidding laws reflect the tension between allowing flexibility and curbing the agency discretion that pervades public contract law. The Model Code sets out very general requirements, with more detailed requirements left to agency regulations.⁶⁹

ii. Single or Separate Contracts.—Public works agencies customarily have wide discretion as to when to subdivide a project and award separate contracts for each segment or component of the work. Because this decision determines the monetary size of the contract, the agency's decision in this matter may directly affect the number and type of available bidders. However, compelling economic, engineering, and financial reasons may influence an agency's decisions regarding the dividing of contracts. As long as these considerations are reasonable, courts have tended to uphold the contracting agency's actions in determining the size and scope of the contract.

However, if the specifications issued by the contracting agency result in limiting the bidding or otherwise impairing free competition in the selection of public contractors, the award may be enjoined or nullified, or the agency may be required to reject all bids and readvertise on more appropriate terms. For example, an

 $^{^{64}}$ Id. at 667–68 (citations omitted).

⁶⁵ See, e.g., City of Atlanta v. J.A. Jones Constr. Co., 260 Ga.
658, 398 S.E.2d 369, 370, on remand, 198 Ga. App. 345, 402
S.E.2d 554, cert. denied, 111 S. Ct. 2042 (1990).

⁶⁶ Carbro Constr. Co. v. Middlesex County Util. Auth., 233 N.J. Super. 116, 558 A.2d 54, 58 (1989) (curtailing local discretion and requiring strict compliance with bidding requirements protects public against favoritism, extravagance, and corruption).

 $^{^{67}}$ 103 Fla. 976, 723–24, 138 So. 721, 722 (1931).

⁶⁸ CONN. GEN. STAT. ANN. § 13a-95 (1999).

⁶⁹ ABA Model Code, supra note 59.

agency was not allowed to arbitrarily divide a project for installation of traffic signals into separate contracts for procurement of materials, equipment, and labor where these items were parts of an integrated project. The apparent purpose of the separation was to keep each contract under the statutory minimum price for requiring competitive bidding.⁷⁰

On the other hand, where these items are not necessarily integrated in the type of construction work called for, they may be provided under separate contracts. Specialty work frequently is sufficiently different from basic construction tasks to warrant separation of contracts. Peparate contracts have also been upheld for construction of two similar facilities where the projects were to be paid for from separate funding sources.

Although state laws mandating separate bidding for different construction trades are not normally applicable to transportation construction contracts, the Ohio Supreme Court addressed the question of whether a state separation statute applied to a contract for the construction of roadside rest areas. A local mechanical contractors association sought to enjoin the advertisement, claiming that the state bidding law required separate contracts for each mechanical trade involved in the project.73 In this case, each rest area involved construction of public facilities and storage buildings with janitors' and storage rooms, and installation of a complete wastewater treatment system. Examining the Ohio DOT's statutory authority to enter into contracts, the court concluded that although the legislature had not authorized construction of roadside rest areas in specific terms, ample authority could be inferred from other legislation making the agency responsible for highway and roadside conditions.74 The more difficult question was whether the DOT was subject to a statutory requirement that state contracts involving plumbing, gas fitting, steam heat and power, and electrical equipment must be awarded in separate contracts for each mechanical trade involved.75 Construing the applicable statutes, the court held that they required the DOT to advertise and award separate contracts for each mechanical trade involved in the desired work. 76

Because transportation construction programs generally use standard specifications and procedural manuals, the room for discretionary combining or splitting of projects for bidding is reduced. Competitive bidding practices have been standardized along lines that courts, agencies, and contractors agree are reasonable and feasible and that do not weaken the process of procurement by competition. This standardization has also contributed to stabilizing this aspect of bid preparation.

iii. Lump Sum Versus Unit Price Bids.—Another aspect of bidding that is normally left to the discretion of the contracting agency is whether bids must be submitted in the form of a lump sum for the entire project or in a series of prices for units of work or materials. Lump sum bids are favored where construction jobs involve a variety of operations and it is impractical to break down the work into a few basic units of materials and labor. Ultimately, the success of this method requires complete and accurate specifications, detailed work plans, and accurate quantities of labor and materials. Failure to provide full guidance on these technical matters increases the risk of excessively high bids, as bidders attempt to price risks that they cannot reasonably evaluate.

Unit price bidding is favored where a project requires large quantities of relatively few standardized materials and construction operations, or where the exact quantities of materials and labor are not known in advance. A proposal form is furnished to bidders, containing the agency's estimate of the quantities to be used in the project. In submitting its bid, the contractor inserts the unit price as requested, and extends the unit prices by the agency's estimated quantities.⁷⁸

When a contract is bid on a unit price basis, reasonable variations may be made in the work without the necessity of formal change orders. However, this flexibility applies only to items originally covered in the contract. If material discrepancies occur between the estimated and actual quantities required for the work, the agency may reconsider the original contract.

In a bid based on unit prices, discrepancies may occur between the total unit price shown in the bid and the same price as calculated by multiplying the unit price by the number of units to be furnished. If bidding instructions anticipate such situations and specify which figure will be accepted, the parties to the contract

⁷⁰ National Elec. Contractors Ass'n, Puget Sound Chapter v. City of Bellevue, 1 Wash. App. 81, 459 P.2d 420, 421 (1969) (where bidding statute was written in conjunctive, "improvement, including materials, supplies, and equipment," a project could not be broken out into separate contracts for materials and installation).

⁷¹ See, e.g., infra notes 75 and 76.

 $^{^{72}}$ Daves v. Village of Madelia, 205 Minn. 526, 287 N.W. 1, 123 A.L.R. 569 (1939).

⁷³ Mechanical Contractors Ass'n of Cincinnati v. State, 64 Ohio St. 2d 192, 414 N.E.2d 418 (1980) (rest areas were considered part of the highway, thus the Department of Transportation was authorized to contract for their construction and improvement).

 $^{^{74}}$ Id. at 420–21.

 $^{^{75}}$ Ohio Rev. Code Ann. $\$ 153.02, 153.03 (1985 Supp.), repealed 1996.

⁷⁶ A dissent argued, however, that the Director of Transportation could act under special highway enabling legislation and award contracts for highway and bridge work in any manner deemed advantageous to the public. 414 N.E.2d at 421–22 (citing OHIO REV. CODE § 5529.05).

⁷⁷ See UTAH CODE § 72-6-102 (agency required to adopt standard plans and specifications for construction and maintenance of state highways).

 $^{^{78}}$ State Highway Admin. v. David A. Bramble, Inc., 351 Md. 226, 717 A.2d 943, 944 (1998).

are held to resolving discrepancies by that means. Whether the bid must be rejected will depend on how much discretion an agency's statute allows in resolving bidder mistakes. ⁷⁹ One court has held that the contracting agency could not reject the bid as being ambiguous when this error occurred. ⁸⁰ Another has held that the agency had the right to reject a bid in spite of an "errors in bid" formula contained in the bid advertisement, where accepting the bid would have allowed the bidder to choose between two differing price totals. ⁸¹ Where the specifications clearly require that both unit prices and total prices for each bid item be included, a bid may be found nonresponsive for failure to include both. ⁸² A Louisiana court addressed this issue:

Even though DOTD's rigid specifications as to the bid form may have seemingly harsh results, any interpretation but the most literal would contravene the stricti juris nature of the public contract laws. As our brethren on the Fourth circuit have noted:

"[B]idding in accordance with the advertisement is essential to satisfy the purposes for which the public bid laws were enacted. If public bidding is an honest attempt at getting the best value for tax moneys, then every bidder must be held bound by the terms of the advertising. To allow anything less than a bid conforming on its face to the advertised specifications would constitute an open invitation to the kind of impropriety and abuse the public bid laws were designed to prevent."

One cause of confusion may be a contracting agency's reservation of the right to award contracts on only a part of the total work described in the bid advertisement. In *Devir v. Hastings*, a municipal agency requested bids for resurfacing four streets, but reserved the right to award contracts for less than all four. ⁸⁴ The bid advertisement specified that bids must be submitted on a per yard basis. The challenger argued that the agency's reservation deprived bidders of a common basis for such a unit price bid. The court held, however, that prospective bidders could determine both the minimum and maximum amounts of material needed and so could compete on an equal footing.

b. Advertisement for Bids

i. General Requirements for Advertisement.—For competition to be fostered in public bidding, 1) everyone qualified and desiring to bid on the project must be adequately informed of it, and 2) all bidders must be

given equal opportunity to bid and have their bids considered on the same terms. Requirements for public advertisement of projects and invitations to bid are implemented through a publication of a formal call for proposals or invitation for bids. This must contain the essential information about how bids should be submitted, and must inform bidders of all the essential features of the project. For example, Louisiana's public procurement statute, which is based on the Model Code, requires that the invitation for bids contain all contractual terms and conditions applicable to the procurement, as well as the evaluation criteria to be used. Requirements of state laws regarding advertisement for bids on highway construction are found in Appendix A.

The requirement for public advertisement, and the terms on which it must be provided, are based in statute.⁸⁷ Typically, statutes relating to advertisement of public works projects set forth the times, places, and forms of publication of the advertisement. Most statutes favor newspapers of general circulation in the county where the work is to be done as the principal means of advertisement.⁸⁸

In addition, since contractors often do business in multi-state regions, they may be contacted more easily through industry trade journals than through local newspapers. Therefore, contracting officers in many states are either directed or authorized to publish notices of their projects and invitations to bid in these trade journals. Other devices for accomplishing this same purpose include publication in an "official newspaper" of the state, and listing in a departmental bulletin published by the state transportation agency.89 Some states also post information about projects and bid opening dates on their Internet Web sites. Colorado allows Internet publication as follows: "The executive director of the department of transportation may invite bids using electronic on-line access, including the internet, for purposes of acquiring construction contracts for public projects on behalf of the department of transpor-

 $^{^{79}}$ See ABA Model Code, supra note 59, at $\$ 3-202(6) and commentary.

 $^{^{80}}$ Pozar v. Dep't of Transp., 145 Cal. App. 3d 269, 193 Cal. Rptr. 202 (1983).

 $^{^{81}}$ Colonnelli Bros. v. Ridgefield Park, 665 A.2d 1136, 1139 (N.J. Super. A.D. 1995).

 $^{^{82}}$ V.C. Nora, Jr. Building & Remodeling v. State, Dep't of Transp. and Dev., 635 So. 2d 466, 472–73 (La. App. 3d. Cir. 1994).

 $^{^{83}}$ Id. (quoting Gibbs Constr. v. Board of Sup'rs of L.S.U., 447 So. 2d 90 (La. App. 4th Cir. 1984)).

^{84 277} Mass. 502, 178 N.E. 617 (1931).

 $^{^{85}}$ See ABA Model Code, $supra\,$ note 59, at $\$ 3-202(2), (3), and commentary.

⁸⁶ Pacificorp Capital v. State, Through Div. of Admin., Office of State Purchasing, 647 So. 2d 1122, 1124 (La. App. 1 Cir. 1994), writ denied, 646 So. 2d 387 (1994).

⁸⁷ In the absence of legislation, public advertisement for bids would be entirely discretionary with the contracting agency, and when utilized would follow procedures designated in the contracting agency's resolution authorizing the contract. Failure to comply with the requirements of such a resolution may defeat the validity of a contract just as surely as failure to comply with procedures specified by statutes or regulations. Reiter v. Chapman, 177 Wash. 392, 31 P.2d 1005, 1006–07, 92 A.L.R. 828 (1934).

 $^{^{88}\,}See$ App. A.

⁸⁹ See Alaska Stat. § 36.30.130 (1998) (publication by the procurement office is required in Alaska in the online Public Notice System for 21 days prior to bid opening); MISS. CODE § 65-1-85 (requiring publication in newspaper of general circulation published in state capital, having general circulation throughout the state).

tation." 90 Electronic bidding will be discussed later in Section f.

Agencies must strictly comply with the statutory time for publication of bid announcements. Where exact dates are not given, the rules must be construed so that the agency accomplishes the legislative purpose of adequate and reasonable notice. Confusion has occasionally arisen over the method of correctly calculating the period over which notices must appear. One typical style of drafting this provision states that the agency shall advertise "for two consecutive weeks" in designated newspapers. An Ohio court gave this interpretation: "In our opinion, the work 'for' [means that]...such advertisement is required 'during the continuance of or 'throughout' the period of two weeks....[I]t follows that two full calendar weeks must elapse subsequent to the date of the first publication before the date fixed for receiving the bids."91

Some statutes address this potential statutory construction problem by specifically requiring publication "at least once per week" for 2 consecutive weeks. 92

Federal approval is required before any advertisement for bids or undertaking of bids in federally funded projects. FHWA requires that a minimum of 3 weeks must be available to bidders before the opening of bids. However, the FHWA Division Engineer is authorized to approve shorter periods in special cases. Ultimately, the question of justification is likely to be a practical one. FHWA recognizes that advertising longer than 3 weeks is desirable for "large, complicated projects that will require considerable time for study and developing of cost data before realistic bids can be prepared." In contrast, small, simple problems of construction and maintenance can be prepared and submitted on short notice.

ii. Content of Bid Advertisements.—Bidding statutes have a variety of approaches to informing prospective bidders of the nature of the work required. The contracting agency's announcement must be sufficient to indicate the character, quality, location, and timetable of a construction project, or the type, quantity, and delivery requirements for purchases of supplies and construction materials.⁹⁶ When a bidder claims that there

is a patent ambiguity in bid documents, a court limits its inquiry to whether a reasonable person could find gross discrepancies, obvious errors in drafting, or a glaring gap.⁹⁷ Bid documents are subject to the same rules of interpretation as are contracts: the documents must be interpreted so as to give meaning to all parts and in a manner that does not create internal conflicts.⁹⁸ An agency's exercise of discretion in adopting bid specifications is reviewed for arbitrary action.⁹⁹

Requirements relating to the content of bid advertisements often vary according to the transportation system involved. Within a state, there may be separate laws regarding state highways, county and municipal roads, turnpikes, and transit systems. Each may differ regarding the information that bid advertisements must contain. For example, Kansas's law relating to contracts of the state highway commission and the county boards of commissioners illustrates these differences. Notice of state highway projects must "specify with reasonable minuteness the character of the improvement contemplated, the time and place at which the bids will be received, and invite sealed proposals for the same..." 100

For projects undertaken by county boards of commissioners, the public notice must

specify with reasonable minuteness the character of the improvement contemplated, where it is located, the kind of material to be used, the hour, date and place of letting of such contract, when the work is to be completed, and invite sealed proposals for the same. Such other notice may be given as the board may deem proper....¹⁰¹

In addition to the character and location of the work, some states have added other items in which there is special interest. Examples include notice that prevailing wage rates must be paid to laborers on the job, 102 whether prequalification of subcontractors is required, 103 whether bids must lie on the entire project unless the contracting officer formally determines that a separation is necessary, 104 and that bid bonds will be required in specified amounts. 105 It is also common for statutes to require that bid invitations reserve to the contracting agency the right to reject all bids if it is

 $^{^{90}}$ Colo. Rev. Stat. \S 24-92-104.5 (1999); see also D.C. Code \S 2-303.03 (C-1) (2002) .

 $^{^{91}}$ State $ex\ rel.$ Dacek v. Cleveland Trinidad Paving Co., 35 Ohio App. 118, 171 N.E. 837, 840–41 (1929).

⁹² See, e.g., 29 DEL. CODE § 6962(b) (1998).

^{93 23} C.F.R. § 635.112(b) (1999).

 $^{^{94}}$ Id.

 $^{^{95}}$ FEDERAL-AID POLICY GUIDE, Oct. 9, 1996, Transmittal 16 (nonregulatory USDOT administrative guidance supplement to 23 C.F.R. \S 635.112).

⁹⁶ See Wilson Bennett, Inc. v. Greater Cleveland Regional Transit Auth., 67 Ohio App. 3d 812, 588 N.E.2d 920, 925, jurisdictional motion allowed, 53 Ohio St. 3d 717, 560 N.E.2d 778 (1990), cause dismissed, 57 Ohio St. 3d 721, 568 N.E.2d 1231 (1991) (invitation to bid and specifications present common basis for bidding).

⁹⁷ Fry Communications v. United States, 22 Cl. Ct. 497, 509 (1991).

⁹⁸ Vanguard Security v. United States, 20 Cl. Ct. 90, 103 (1990).

⁹⁹ Glacier State District Services v. Wis. DOT, 221 Wis. 2d 359, 585 N.W.2d 652, 656 (1998) (specifications reviewed to determine whether they were arbitrary or unreasonable).

¹⁰⁰ KAN. STAT. ANN. § 68-408 (1999).

 $^{^{101}}$ Kan. Stat. Ann. § 68-521(a)(1999); see also, e.g., S.D. Codified Laws § 5-18-3 (2001) (requirements for advertising of state highway projects) and § 31-12-14 (2001) (requirements for advertising county road projects).

¹⁰² OR. REV. STAT. § 279.312(1)(a) (1999).

 $^{^{103}}$ 29 Del. Code Ann. $\$ 6962(c) (1999).

¹⁰⁴ CAL. PUB. CONT. CODE § 10141 (1999).

¹⁰⁵ Mont. Rev. Stat. § 18-2-302 (1999).

deemed appropriate. ¹⁰⁶ They may also require that the notice include information as to where the project plans, specifications, and other pertinent papers may be inspected. ¹⁰⁷ Where bid specifications set out the factors on which bids may be evaluated, they are not necessarily required to include the relative weight that will be given to those factors. ¹⁰⁸

Contracts in which federal-aid funds are used must comply with certain requirements of federal law or regulations, which must be mentioned in the project advertisement. Federal-aid regulations call for specific assurance that state procedures afford all qualified bidders a nondiscriminatory basis for submitting proposals and having their proposals considered. 109 State transportation agencies may not impose statutory or administrative requirements that provide in-state or local geographical preference in the solicitation, licensing, or prequalification or selection process. If there are any features of state law that may operate in a manner to prohibit submission of a bid, or prevent consideration of a bid made by a qualified contractor, the project advertisement must state that those features are not applicable to the advertised contract. 110 In addition, all advertisements must advise prospective bidders that, as a condition precedent to federal approval of the contract, the successful contractor must execute and file with the state transportation agency a sworn statement that it has not been a party to any collusion or restraint of free competitive bidding in connection with the project. 111 In addition, the bidder must file a lobbying affidavit certificate pusuant to 49 C.F.R. Part 20, indicating that no funds were expended for lobbying, and provide an additional affidavit certifying, pursuant to 49 C.F.R. Part 29, that it has not entered into any agreement, participated in any collusion, and is not currently under suspension, debarment, voluntary exclusion, determination of ineligibility by any federal agency, is not indicted or convicted, and has not had a civil judgment against it for any matter involving fraud or official misconduct for the past 3 years.

Finally, federal-aid regulations specifically state that bid advertisements shall not be issued until the provisions of regulations and directives covering administration of the Uniform Relocation Assistance Act have been met and that all needed right-of-way has been acquired, 112 or that all necessary arrangements have been made for it be undertaken and completed for proper schedule coordination. In the event the requirement

that all right-of-way be available is not met before advertisement, the advertisement must include appropriate notice identifying all locations where right of possession and use has not been obtained. ¹¹³

iii. Change of Specifications Following Advertisement.—The project announcement and bidders' proposals are considered to be only invitations and offers, either of which may be changed or withdrawn without penalty prior to the opening of bids and contract award. However, limits are placed on an agency's reserved right to make changes by addendum during the bidding process. Properly issued and provided to all prospective bidders, the addendum becomes part of the invitation for bids. 114 A change announced unilaterally by the contracting agency after advertisement of a project must not give any bidder or group of bidders an unfair advantage, nor may the contracting agency include in the contract any provision benefiting the successful bidder that was not within the terms or specifications that were the basis for the bidding.¹¹⁵ Extensions of time for performance and agreement to accept substitute materials or modified designs are common types of changes that test the application of this rule. Where the change made in the originally announced terms or specifications is substantial, the validity of the competitive award can be preserved best by readvertising the project for bids, giving consideration to the changed terms.

If a contracting agency decides to make additions or modifications in the specifications or bidding instructions after they have been advertised but before the bids are opened, it must make those changes in a manner that assures that all bidders receive notice of them. 116 If statutory procedure is silent on the notification method, the contracting agency's own bidding instructions may provide the necessary guidance. In the absence of any such guidance, the agency still is responsible for notifying all prospective bidders in a manner that ensures the integrity of the bidding process. Accordingly, where an addendum page was disseminated by simply inserting it into the packets of bidding documents remaining to be picked up by prospective bidders, it was held that the agency had not fulfilled its duty of notification.

But where as here, an alternative procedure for giving notice of an addendum to the plans and specifications is utilized after the statutory notice has been published...the alternative procedure so utilized, as a matter of law, must, as a minimum, establish actual knowledge

¹⁰⁶ See, e.g., 23 ME. REV. STAT. ANN. § 753 (2002).

¹⁰⁷ *Id*; see also Ragland v. Commonwealth, 172 Va. 186, 200 S.E. 601, 602–03 (1939) (Plans and specifications placed on file for public inspection or as a reference to bidders become the only authentic and binding specifications).

 $^{^{108}}$ Dunnuck v. State, 644 N.E.2d 1275, 1279 (Ind. App. 1 Dist. 1994).

^{109 23} C.F.R. § 635.110 (1999).

^{110 23} C.F.R. § 635.112(d) (1999).

^{111 23} C.F.R. § 635.112(f) (1999).

 $^{^{112}\ 23\} C.F.R.\ \S\ 635.309(c)\ (1999).$

¹¹³ 23 C.F.R. § 635.309(c)(3) (1999).

¹¹⁴ Leaseway Distribution Centers v. Department of Admin. Servs., 49 Ohio App. 3d 99, 550 N.E.2d 955, 960 (1988).

 $^{^{115}}$ Lake Constr. & Dev. Corp. v. City of New York, 221 A.D. 2d 514, 621 N.Y.S.2d 337, 338 (1995).

¹¹⁶ See Air Support Services Internal v. Metropolitan Dade County, 614 So. 2d 583, 584 (Fla. App. 3 Dist. 1993) (public bid requirements may not be materially altered after submission of bids); Glynn County v. Teal, 256 Ga. 174, 345 S.E.2d 347 (1986) (agency cannot make material changes in plans and specifications without notice to prospective bidders); 29 Del. Code § 6923 (g) (2001).

on the part of the prospective bidder of the fact of the addendum. Thus, as a matter of law, where a challenge to that alternative procedure is promptly entered by an actual bidder who presents a prima facie case that he was unaware of the addendum to his prejudice, the bidding procedure employed...fails and the trial court is required to order the board to reject all bids....¹¹⁷

In issuing an addendum, the agency must be careful that the addendum provides all of the information that it expects bidders to abide by, and that it states very clearly what is being amended in the original invitation for bids. For example, in Air Support Services International, Inc. v. Metropolitan Dade County, the court held that the agency could not impose the time limit for submission of bids that was included in the invitation for bids where none was given in the addendum that extended the time for submission. ¹¹⁸ The court found that the addendum implied that bids would be due by the close of business on the date indicated, rather than at the earlier time of day stated in the original invitation for bids.

Most agencies' procedures limit the time that an addendum may be issued, and may prohibit the issuance of an addendum within a certain short period of time before bid opening. This time limitation acknowledges that late-issued addenda may not reach all bidders prior to bid opening, and also recognizes that bidders may need time to adapt their bids to the new specifications. Thus a Louisiana court found that an addendum issued within 72 hours of bid opening was issued improperly. ¹¹⁹ Not all bidders had been informed of the change, resulting in bidders submitting bids on different specifications. The court enjoined the Parish from awarding the contract, thus requiring the agency to reject all bids. ¹²⁰

c. Bid Security Deposits

The purpose of the statutory requirement for a bid security deposit is to assure that the bidder is acting in good faith, and that if its bid is successful it will enter into the contract and furnish the necessary bonds for performance of the work and for payment for labor and materials.¹²¹ Maine's statute is an example:

Each bidder must accompany his bid with a deposit of a good and sufficient bid bond in favor of the State for the benefit of the department, executed by a corporate surety authorized to do business in the State, or certain securities, as defined in Title 14, section 871, subsection 3, payable to the Treasurer of State, for an amount which the department considers sufficient to guarantee that if the

work is awarded to him, he will contract with the department for its due execution... 122

Statutes or regulations typically specify the amount of the deposit, either as a percentage of the total amount of the bid, or a fixed dollar amount determined by the contracting agency, and the acceptable method or methods of providing the security. A comparative summary of state statutes and regulations relating to bid security deposits is given in Appendix B. In most instances, the statutes and regulations also specify how security deposits will be released or returned to unsuccessful bidders. 123 For example, Alabama's statute provides that all bid bonds except those of the three lowest bidders will be returned immediately after determination of the low bidder, with others returned after the contract is executed. 124 Requirements for bid bonds may also be detailed in standard specifications, consistent with the agency's statutory authority. 125

State statutes may also specify the form of the bid bond. Where a statute required the bonds for public works projects to be written by a surety that was currently on the United States Treasury Department Financial Management Service list of approved bonding companies, bid bonds were held to be covered by that requirement. ¹²⁶ More typically, statutes require that the bond be issued by a surety authorized to do business in the state. ¹²⁷

When bidders may satisfy security requirements by furnishing a surety bond, the surety's obligation typically covers the difference between the amount of the bid and the amount the contracting agency must pay to another contractor to perform the work covered by the bid. When bidders may meet security requirements by depositing a check or bank draft, they must post a specific dollar sum, which is then subject to forfeiture if the bidder fails to execute the contract.

Whether bid security deposits are penalties or liquidated damages has frequently been questioned. One court has considered the forfeiture of the bid bond to be liquidated damages, intended to compensate the agency for its costs in awarding to the next low bidder or read-

¹¹⁷ Boger Contracting Corp. v. Bd. of Comm'rs, 60 Ohio App. 2d 195, 396 N.E.2d 1059, 1064 (1978) (emphasis in original).

¹¹⁸ 614 So. 2d 583, 584 (Fla. App. 3 Dist. 1993).

 $^{^{119}}$ Grace Constr. Co. v. St. Charles Parish, 467 So. 2d 1371, 1374 (La. App. 1985).

 $^{^{120}} Id.$

¹²¹ ABA Model Code, supra note 59, at § 5-301.

¹²² 23 Me. Rev. Stat. Ann. § 753 (2002).

¹²³ See Environmental Safety and Control Corp. v. Auburn Enlarged City Sch. Dist., 167 A.D. 2d 876, 561 N.Y.S.2d 972 (1990).

 $^{^{124}}$ See Ala. Code § 39-2-5 (2001 supp.).

¹²⁵ See Wash. Rev. Stat. § 47.28.090 and Washington State Department of Transportation, Standard Specifications for Road, Bridge and Municipal Construction, § 1-02.7 (2002).

¹²⁶ Gibson Roofers v. Terrebonne Parish Consol. Gov't, 577 So. 2d 362, writ denied, 580 So. 2d 672 (La. App. 1 Cir. 1991).

¹²⁷ See Kan. Stat. Ann. § 68-410 (2000).

¹²⁸ City of Cheyenne v. Reiman Corp., 869 P.2d 125, 127 (Wyo. 1994) (forfeiture of bid bond is liquidated damages for low bidders' failure to execute contract or proceed with construction); WYO. STAT. § 15-1-113 (2002); see also Nebraska Standard Specifications § 103.05 (forfeiture of bid security for failure to execute contract is not penalty but rather in liquidation of damages sustained).

vertising.¹²⁹ Another has interpreted the bid bond as a penalty, noting that the bid bond document describes the amount of the bond as a "penal sum."¹³⁰ The language of these forms has not, however, been considered conclusive proof of their intention or effect. When questions of enforcement have arisen, courts have allowed the circumstances to govern each case, and forfeiture of security deposits may be avoided where unusual hardship or inequity would result.

Much of the reported litigation over interpretation of bid security requirements arises from circumstances where bidders want relief from bid mistakes. 131 However, one case involved the bidder's deliberate refusal to execute the contract because of alleged failure of the contracting agency to perform. A successful bidder believed that the contracting agency would not be able to furnish the needed right-of-way by the time of execution, and delayed executing the contract. 132 Ultimately, the contractor had to forfeit its deposit when the court held that the contracting agency had adequate legal authority to obtain the right-of-way through condemnation, and was under no obligation to acquire the land in advance of the contract execution. Unless conditional terms are set out and accepted in the bid, the bidder is not relieved of its contractual duty under the bid merely because it believes that the contracting agency will not be able to perform its part of the contract.

Compliance with bidding procedure is an administrative function, and courts do not substitute their judgment for that of the contracting agency in the absence of fraud. So where an agency rejected a bid because the bidder's security deposit check was not properly certified, the court upheld the agency's action over arguments that the defective certification complied with the intent of the law. 133 Depending on statutory requirements, the requirement of a bid bond may be considered permissive and subject to waiver by the agency. 134 Also, where the contractor's signature on the bond is not necessary for enforcement of the bond, the requirement of that signature may be waived. 135 However, a bid could properly be rejected because of the surety's failure to use the bid bond form required by the agency, where the failure resulted in required information being omitted.¹³⁶ This was found to be an error of substance and not merely of form, because required information was not provided to the agency.

d. Other Bidder Requirements

Some agencies may require attendance at the pre-bid conference as a condition for having the contractor's bid considered. Where the invitation for bids expressly stated that a bidder's attendance at the pre-bid meeting was mandatory in order for its bid to be considered, the agency did not violate competitive bidding requirements when it rejected the low bidder who had not attended the pre-bid meeting. ¹³⁷ Because of concern about particular site conditions, the agency had determined that prospective bidders must visit the site before bidding, and had written the specifications to require attendance at a pre-bid meeting held at the site. The court did not rule as to whether the agency had authority to waive the attendance requirement, but found that it was not arbitrary to refuse to do so. ¹³⁸

e. Submission of Bids and Award of Contract

i. Authority of Contracting Agencies.—Procedures for submission of bids and award of contracts for public works projects are based on statutory provisions. The validity of an award depends on strict compliance with these statutes. ¹³⁹ In some instances, statutes describe in detail the steps that bidders and agencies must take in moving from bid filing to contract award. However, these procedural requirements may also be promulgated as rules. Where administrative rules are within the agency's statutory authority and are consistent with the implicit requirement that they be designed to strengthen free and open competition among qualified bidders, they have withstood challenge as unconstitutional delegations of rulemaking authority.

ii. Submission, Opening, and Acceptance of Bids.—Requirements designating the time and place for filing bids, and the form of the bid, may be set out in the contracting agency's regulations, in its standard specifications, and in the instructions issued with the proposal form. Strict compliance with these requirements is essential. Contracting agencies, either by statute or administrative rules, generally reserve the right to reject any bid that fails to adhere to these require-

 $^{^{129}\,}See$ City of Cheyenne v. Reiman Corp., 869 P.2d 125, 127 (Wyo. 1994).

 $^{^{130}}$ Powder Horn Constructors v. City of Florence, 754 P.2d 356, 366–68 (Colo. 1988).

 $^{^{131}}$ See § 3.

 $^{^{132}}$ Coonan v. City of Cape Girardeau, 149 Mo. App. 609, 129 S.W. 745 (1910).

¹³³ Menke v. Bd. of Educ., Indep. School Dist. of West Burlington, 211 N.W.2d 601 (Iowa 1973) (bank used rubber stamp to certify check instead of officer's handwritten signature).

 $^{^{134}}$ F.H. Myers Constr. Corp. v. City of New Orleans, 570 So. 2d 84, 85 (La. App. 4 Cir. 1990); Thigpen Constr. Co. v. Parish of Jefferson, 560 So. 2d 947, 953 (La. App. 5 Cir. 1990); LSA-R.S. 38:2218(A).

 $^{^{135}}$ State v. Integon Indem. Corp., 105 N.M. 611, 735 P.2d 528, 530 (1987).

 $^{^{136}}$ M & L Industries v. Terrebonne Parish Consol. Gov't, 602 So. 2d 321, 322 (La. App. 1 Cir. 1992) $writ\ denied,\ 604$ So. 2d 1010.

¹³⁷ Scharff Bros. Contractors v. Jefferson Parish School Bd., 641 So. 2d 642 (La. App. 5 Cir. 1994), writ denied, 644 So. 2d 399, reconsideration denied, 648 So. 2d 384 (1994).

¹³⁸ Id. 641 So. 2d at 644.

¹³⁹ Percy J. Matherne Contractor v. Grinnell Fire Protection Systems Co., 915 F. Supp. 818 (M.D. La. 1995), *affd*, 102 F.3d 550 (5th Cir. 1995) (public bid law is mandatory, and any contravention of its provisions renders the contract null and void).

¹⁴⁰ See, e.g., Hawaii Corp. v. Kim, 53 Haw. 659, 500 P.2d 1165, 1169 (1972) (contracting officer could set out bidding procedure in absence of a specific statute doing so).

ments.¹⁴¹ Courts have upheld these technical requirements as mandatory for both bidders and contracting agencies and have taken the position that these requirements may not be waived.¹⁴² It is customary for state transportation agencies to require that proposals be submitted on official bid forms that include specific instructions as to the time and place for submission of bids, and that warn that proposals received after the time and date designated will be returned to the bidder unopened.¹⁴³

Bidding statutes and rules normally specify that bids will be opened in a public session, which all bidders may attend. 144 Courts have reached varying results on the issue of whether the time for submission of bids must be strictly complied with. The Washington Supreme Court has held that the timeliness requirement could be held to have been complied with when the bidder mailed its bid in enough time to reach the agency prior to bid opening, even though it did not arrive on time. 145 However, most courts have taken a much stricter approach. For example, the Georgia Court of Appeals held that the agency's award to an untimely bidder was improper, and upheld an award of bid preparation costs. 146 The court discussed at some length the importance of adhering to a strict rule of timely submission, noting how bidders often adjust their prices up to the last minute before bids are due. 147 Thus, even an additional few minutes could be a material advantage that the untimely bidder would have over the other bidders. The Virginia court also held that the statement in the invitation for bids fixing the time for submission of bids is a material and formal requirement that must be strictly complied with, and that cannot be waived. 148 An Ohio appellate court held that while there is a presumption that the clocks in the agency's building are correct, it is a rebuttable presumption and the rejected

bidder may be allowed to show that its bid was submitted in a timely fashion. 149

The rule on opening of bids in accordance with the terms set forth in the advertisement of the project and bidding instructions, together with a corollary requirement that the award will be announced at that time or within a specified or a reasonable time thereafter, are mandatory duties that contracting agencies owe to bidders. Thus, where an agency issued the original invitation for bids specifying that bids must be submitted on the due date by 1:00 p.m., then issued an addendum extending the date without setting a time, it was to presume that bids were due to be submitted by the close of business that day and not at 1:00 p.m.¹⁵⁰

Postponement of scheduled bid openings and contract award without strong justification may be challenged as abuse of discretion. Generally, the need to introduce changes in project specifications, or to enable bidders to evaluate and reflect such changes in their bids, has been the most readily accepted justification for postponement.¹⁵¹

There is no contract until the bid is accepted and a contract is awarded by the agency. The agency's acceptance of the low bid may be conditional. ¹⁵² In *Dick Fischer Development No. 2, Inc. v. Department of Administration*, an agency acknowledged the submission of the low bid with a notice that indicated that the contract would be awarded provided that no bid protests were filed within 5 days. ¹⁵³ The notice provided that if a protest was filed, the award would be held in abeyance until the protests were resolved. The project was then canceled before the protests were resolved. The court held that there was no breach of contract, because no contract had been formed due to the failure of a condition precedent, which was the resolution of bid protests.

The rules are positive and explicit regarding acceptance of bids that do not fully and precisely meet all formal requirements set forth in regulations and instructions. Bids that are technically defective or deficient must be considered "irregular" or "informal," and may be rejected. The rules calling for rejection of irregular bids are generally stated in permissive terms. As a result, the possibility of waiver of technical defects is always present. ¹⁵⁴ However, the courts recognize a distinction between nonmandatory bidding requirements that can be waived and mandatory requirements that

 $^{^{141}}$ Mont. Rev. Stat. \S 18-2-303(3) (1999) (agency may not accept bid that does not comply with statutory requirements).

 $^{^{142}}$ Hawaii Corp. v. Kim, 53 Haw. 659, 500 P.2d 1165, 1169 (1972).

¹⁴³ But see Gostovich v. City of West Richland, 75 Wash. 2d 583, 452 P.2d 737 (1969) (holding that where a bid was mailed more than 24 hours before the time for bid opening, and there was no suggestion of fraud or undue competitive advantage, the bid could be accepted despite its late arrival).

¹⁴⁴ See ABA Model Code, supra note 59, at § 3-202(4).

¹⁴⁵ Gostovich, 452 P.2d at 740. Query whether this would still apply when more reliable and commonly used methods of delivery, such as overnight mail, are now available to contractors.

 $^{^{146}}$ City of Atlanta v. J.A. Jones Constr. Co., 195 Ga. App 72, 392 S.E.2d 564, 569 (Ga. 1990), $rev\,'d$ on other grounds. 260 Ga. 658, 398 S.E.2d 369, 370 (1990). The Supreme Court upheld an award of bid preparation costs, but reversed awards of lost profits and damages for violations of due process.

¹⁴⁷ Id. 392 S.E.2d at 566.

 $^{^{148}}$ Holly's, Inc. v. County of Greensville, 250 Va. 12, 458 S.E.2d 454, 457 (1995).

 $^{^{149}}$ PHC, Inc. v. Village of Kelleys Island, 71 Ohio App. 3d 277, 593 N.E.2d 386, 387 (1991).

¹⁵⁰ Air Support Services Int'l, Inc. v. Metropolitan Dade County, 614 So. 2d 583, 584 (Fla. App. 3 Dist. 1993).

 $^{^{151}}$ Yonkers Contracting Co. v. Tallamy, 283 A.D. 749, 127 N.Y.S.2d 646 (1954).

 $^{^{152}}$ Dick Fischer Dev. No. 2, Inc. v. Department of Admin., State of Alaska, 778 P.2d 1153 (Alaska 1989).

 $^{^{153}}$ Id.

Wilson Bennett, Inc. v. Greater Cleveland Regional Transit Auth., 67 Ohio App. 3d 812, 588 N.E.2d 920, 925 (1990), cause dismissed on joint applications to dismiss, 568 N.E.2d 1231, 57 Ohio St. 3d 721 (1991).

cannot be waived without impairing the essential competitive nature of the contract award. Further discussion of nonresponsive bids is addressed in Section 2.A.5. of this volume, below.

f. Electronic Bidding

The use of the Internet in our daily lives is increasing. The Internet has fostered a dramatic change to the bidding and letting process. Electronic bidding is the transfer of proposal data between the contracting agency and its contractors. Electronic bidding can either supplement or replace the traditional bid documents. Electronic bidding can be one-way, where the contractor submits the bid information on a floppy disc or CD that either supplements or replaces the paper copies. In this method the contract proposal should contain language declaring which bid shall govern, in instances where the electronic and paper copy do not match. The second category is two-way. where the contractor submits its bid over the Internet. State transportation agencies have utilzed bid preparation software packages, which include Trns.port Expedite, part of the American Association of State Highway Transportation Officials (AASHTO) suite of products. 156

As of May 2006 there were at least 33 state highway agencies that permitted contractors to submit electronic bids. Generally, if allowed by state law and policy, the Internet advertising of bids in lieu of traditional means on federal-aid projects is allowed by FHWA if it determines that this would generate "adequate publicity." FHWA policy permits electronic bidding, and allow bids to be announced by means other than reading them aloud, such as posting on the Internet. Similarly, electronic submittals and electronic signatures are considered acceptable. State highway agencies have secured licenses to use bid systems such as "Bid Express" and other systems to implement electronic bidding. State laws should be examined to determine whether any changes are necessary. Electronic bidding is widely accepted, and certain highway agencies now require only electronic submissions and prohibit paper submissions. 157

g. Bidder Preferences and DBE Requirements

One or both of these items may be required as an element of bid responsiveness. Both are addressed in detail in Section 4.

h. Determination of Lowest Responsible Bidder

i. Time for Award and Execution.—Some states' statutes provide for a time period in which the agency must award the contract, and a subsequent time period in which the contractor must execute the contract. An Ohio court has held that the statutory time period for award and execution, which was 60 days, could be extended by mutual agreement of the parties, which could be implied from the parties' conduct. The court further noted that the only entities that may invoke the 60-day limit are the parties, either of whom may withdraw its consent to further extensions of time.

The Model Code allows the award to be made electronically. The award is required to be made in writing, and the Model Code defines "written or in writing" to include electronic means. ¹⁶¹ Once an award of a contract has been made, it may not be withdrawn by the agency. ¹⁶²

ii. Selection of Lowest Responsible Bidder.—State statutes generally require that public works contracts shall be awarded to the "lowest responsible bidder." A comparison of state statutes regarding award of contracts is found in Appendix C.

One court has noted that even in the absence of a statutory requirement to do so, public policy requires the award of contracts to the lowest responsible bidder where the agency has chosen to solicit bids. ¹⁶⁴ This term is often used without any language reserving the contracting agency's ability to consider any factors other than price. However, some statutes allow additional criteria for selection of successful bidders, such as Illinois' statute, which is based on the Model Code:

Bids shall be evaluated based on the requirements set forth in the invitation for bids, which may include criteria to determine acceptability such as inspection, testing, quality, workmanship, delivery, and suitability for a particular purpose. Those criteria that will affect the bid price and be considered in evaluation for award,

 $^{^{155}}$ This is discussed more fully in § 2 infra.

¹⁵⁶ FHWA, CONTRACT ADMINISTRATION CORE CURRICULUM PARTICIPANT MANUAL AND REFERENCE GUIDE, § III, State Procedures, 2006,

http://www.fhwa.dot.gov/programadmin/contracts/core02.cfm, last accessed Sept.~8, 2013.

 $^{^{157}\,\}mathrm{FHWA}$ Web site, Construction Program Guide Electronic Contracting, see

http://www.fhwa.dot.gov/construction/cqit/econtract.cfm, last accessed Sept. 8, 2013.

 $^{^{158}}$ See Wash. Rev. Code \S 47.28.100 (contractor must execute within 21 days after award).

 $^{^{159}}$ Prime Contractors v. Girard, 655 N.E.2d 411, 101 Ohio App. 3d 249 (Ohio App. 11th Dist. 1995).

¹⁶⁰ *Id.* 655 N.E.2d at 416.

 $^{^{161}}$ ABA Model Code, $supra\,$ note 59, at §§ 3-202(7), 1-301(26).

¹⁶² Fumo v. Redevelopment Auth. of Philadelphia, 541 A.2d 817, 820, 115 Pa. Commw. 542; appeal granted, Greek Orthodox Cathedral of St. George v. Fumo, 557 A.2d 727, 521 Pa. 625; appeal dismissed, 568 A.2d 947, 524 Pa. 32; reargument denied, 580 A.2d 294, 525 Pa. 292 (1990).

¹⁶³ See, e.g., Pataula Electric Membership Corp. v. Whitworth, 951 F.2d 1238, 1241 (11th Cir. 1992), reh'g denied, Georgia Power Co. v. Pataula Elec. Membership Corp., 506 U.S. 907, appeal after remand, Flint Elec. Membership Corp. v. Whitworth, 68 F.3d 1309, opinion modified, 77 F.3d 1321 (11th Cir. 1996) (Georgia law requires award to lowest responsible hidder)

 $^{^{164}}$ City of Philadelphia v. Commonwealth Dep't of Envtl. Resources, 577 A.2d 225, 228, 133 Pa. Commw. 565 (1990).

such as discounts, transportation costs, and total or life cycle costs, shall be objectively measurable. The invitation for bids shall set forth the evaluation criteria to be used. 165

In a variation on determining the lowest responsible bidder, statutes may allow the agency to consider factors such as the time that the bidder proposes to take to complete the project in addition to the contract price. Arizona enacted a statute allowing "A + B" bidding, in which the agency may select the low bidder based on a combination of A) the contract price, plus B) the calendar days needed to complete the project. 166 In order to assign value to the calendar days, the agency determines the cost to the traveling public of using roads that are under construction. 167

Court decisions also provide a working definition of "lowest responsible bidder" that fits the pattern formed by most statutes and reflects the interests of the public and the capabilities of contract administration techniques. These decisions address both the elements of "bidder responsibility" and "bid responsiveness." Generally, a bid will be considered "responsive" if it promises to do what the bid specifications demand, and a bidder is considered "responsible" if it can perform the contract as it has promised. ¹⁶⁸

Bidder responsibility thus includes a wide range of factors in addition to the capacity to supply labor and materials, and may involve business morality or trustworthiness. ¹⁶⁹ It may also include the bidder's previous performance on similar contracts. ¹⁷⁰ However, the obligation to award to the lowest responsible bidder does not allow the agency to choose the "most responsible;" once a bidder is qualified as responsible, the agency may not compare relative degrees of responsibility. ¹⁷¹ However, if statutory authority includes "best bidder,"

the agency may conduct a qualitative determination as to which bidder was the lowest and "best."

Most of the factors bearing on a contractor's ability to perform satisfactorily generally are discovered in the processes of licensing and prequalification. 172 Thus, most instances in which a contracting agency rejects the lowest-priced bid in favor of a higher-priced offer occur because the rejected bid fails to meet some technical specifications of the project. Responsiveness to the advertised specifications is an essential element of the competitive bidding process. The contracting agency's duty to assure compliance with this requirement may be enforced either by a bidder who is passed over or by a taxpayer who has standing to challenge the agency's action. An unsuccessful bidder may be able to challenge the legality of the contracting agency's action by way of injunctive or declaratory relief or by mandamus. 173 Some courts have held that in the absence of a statute, an unsuccessful bidder does not have standing to challenge an award unless it is also a taxpayer. 174 In an Ohio case, the fact that the challenger paid gasoline taxes was insufficient to establish standing as a taxpayer, even though the project was funded with federal gas tax dollars. 175 The use of a "special fund" required a showing that the plaintiff had a special interest in the use of that fund, that its own property rights were in jeopardy, and that it would sustain damages different from those sustained by the public generally. 176

However, some statutes specifically allow unsuccessful bidders to challenge contract awards, even if they are not also taxpayers.¹⁷⁷ A bidder on a federal contract has been found to have standing under the federal Administrative Procedure Act to challenge the award of a federal contract.¹⁷⁸

iii. Rejection of All Bids.—A contracting agency may reject all bids received for a particular project and readvertise the contract. Although it is arguable that this authority is implicit in the agency's general power to select the lowest responsible bidder, the authority of state transportation agencies to reject all bids is generally set forth in statute. The Professional Profession Professional Profes

 $^{^{165}}$ 30 Ill. Comp. Stat. 500/20-10(e) (1999); Model Code, supra note 59, at \S 3-202(5).

¹⁶⁶ Ariz. Rev. Stat. § 28-6923(I).

 $^{^{167}\} See$ Arizona DOT's Web site for information about A+B Bidding at

http://www.dot.state.az.us/roads/constgrp/A+BGuide.pdf.

¹⁶⁸ Taylor Bus Service v. San Diego Bd. of Educ., 195 Cal. 3d 1331, 1341–42, 241 Cal. Rptr. 379 (1987); see also Irwin R. Evens & Son, Inc. v. Board of Indianapolis Airport Auth., 584 N.E.2d 576, 585 (Ind. App. 4 Dist. 1992) (bid is responsive if it conforms in all material respects to the agency's bid specifications).

 $^{^{169}}$ Boydston v. Napa Sanitation Dist., 222 Cal. 3d 1362, 1369, 272 Cal. Rptr. 458, $reh^{\prime}g$ denied, 273 Cal. Rptr. 331, 222 Cal. 3d 1362 (1990); Trap Rock Indus. v. Kohl, 59 N.J. 471, 284 A.2d 161 (1971).

¹⁷⁰ Nevada State Purchasing Div. v. George's Equipment Co., 105 Nev. 798, 783 P.2d 949, 954 (1989); Hanson v. Mosser, 247 Orc. 1, 427 P.2d 97, 101 (1967).

¹⁷¹ Boydston v. Napa Sanitation Dist., 462, 222 Cal. 3d 1362, 1369, 272 Cal. Rptr. 458 (1990) (citing City of Inglewood-Los Angeles County Civic Center Auth. v. Superior Court, 7 Cal. 3d 861, 103 Cal. Rptr. 689, 500 P.2d 601 (1972)); see also Bowen Eng'g Corp. v. W.P.M., Inc., 557 N.E.2d 1358 (Ind. App. 2 Dist. 1990).

 $^{^{172}}$ See Section 2 infra.

 ¹⁷³ Conway Corp. v. Construction Eng'rs, Inc., 300 Ark. 225,
 782 S.W.2d 36, 41, cert. denied, 494 U.S. 1080 (1989).

¹⁷⁴ L & M Enterprises v. City of Golden, 852 P.2d 1337, 1339 (Colo. App. 1993) (contractor not among class of persons protected by public bidding statute); Michael Facchiano Contracting v. Pa. Turnpike Comm'n, 153 Pa. Commw. 138, 621 A.2d 1058, 1059 (1993) (disappointed bidder must be a taxpayer to sue; has no property interest in contract and has suffered no injury entitling it to a remedy).

 $^{^{175}}$ Ohio Valley Mall Co. v. Wray, 104 Ohio App. 3d 629, 662, N.E.2d 1108 (1995).

¹⁷⁶ Id. 662 N.E.2d at 1111.

 $^{^{177}\,}See,\,e.g.,\,\text{Ala.}$ Stat. § 41-16-31.

 $^{^{178}}$ Clark Constr. Co. v. Pena, 930 F. Supp. 1470, 1475 (M.D. Ala. 1996).

¹⁷⁹ ABA Model Code, *supra* note 59, at § 3-301. In the absence of a legislative reservation of the right to reject all bids, courts have recognized that public authorities have this right

ing the use of this authority tend to look for violations of agency procedures or actions that exceed the scope of the contracting officer's lawful discretion. An agency's decision to reject all bids is subject to judicial review under a variety of standards. However, in most jurisdictions, the decision will be sustained unless it was arbitrary or otherwise unlawful. 180

In some cases it has been held that public authorities claiming the right to reject all bids must show that they had a rational basis for doing so. 181 Others have required that there be a finding of just cause or best interest of the state. 182 Louisiana's statute was amended to include a requirement that the agency have just cause for rejecting all bids. 183 In overturning a lower appellate court, the Louisiana Supreme Court held that this amendment indicated the Legislature's intent to change the awarding agency's previous broad discretion in rejecting all bids. 184 Some states' statutes require that the agency set out in writing its reasons for rejecting all bids. 185 Where there is such a requirement and it is fulfilled, no further demonstration of facts supporting rejection of all bids is necessary. 186

If bids are to be rejected, fairness requires that determination and notification be prompt, but no standard for measurement of promptness fits all cases. Where there is a statute requiring the agency to award the contract within a certain period of time, it may be implied that if the agency is going to reject all bids, it should do so within that same time period. 187

Where rejected bidders are entitled to an administrative hearing, the hearing officer's inquiry is narrow and is limited to whether the purpose of competitive bidding has been subverted or whether the agency acted fraudulently, arbitrarily, or illegally. However, one court has held that where all bids are rejected, as

implicit in their contracting authority. See Annotation, 31 A.L.R. 2d 469 (1953).

opposed to the low bidder being rejected individually, a rejected bidder is not entitled to a hearing. 189

A contracting agency may be denied the right to exercise its authority to reject all bids because of its own mistakes or procedural errors. Such questions have been raised when illegal bids were accepted, 190 bids exceeded estimated costs or appropriated funds for the contract, 191 errors were committed in official estimates, 192 and acceptance of a bid was withdrawn prior to notification of the bidder. 193 In Clark Construction Company v. Pena, Clark was the low bidder for a federally funded contract being awarded by the Alabama Department of Transportation (ADOT).¹⁹⁴ FHWA refused to concur in the award to Clark due to ADOT's omission of a traffic control note in the approved plans and specifications. The ADOT then rejected all bids and readvertised the project. Clark sued to enjoin the award after the second round of bidding. The federal court found that the omission of the traffic control note was immaterial to the integrity of the bidding process. The Department admitted that but for FHWA's lack of concurrence, it would have awarded the contract to Clark. The court held that both ADOT and FHWA had violated the Federal Highway Act, and permanently enjoined the award and ordered ADOT to accept Clark's original bid. 195 The court sought to avoid sending a message to future bidders that their chances of obtaining government contracts would be dependent on the agency's not making "careless mistakes of questionable importance," and also sought to prevent public officials from violating bid award requirements at will. 196

In another federal case involving the review of a rejection of all bids, the court held that clear and convincing evidence would be required in order to support reinstatement of the canceled solicitation, as reinstatement amounted to a form of injunctive relief.¹⁹⁷

An agency was found to have exceeded its power when it rejected all bids and intended to readvertise,

¹⁸⁰ William A. Gross Constr. Assoc., Inc. v. Gotbaum, 150 Misc. 2d 478, 568 N.Y.S.2d 847 (1991).

 $^{^{181}}$ Computer Shoppe v. State, 780 S.W.2d 729, 737 (Tenn. App. 1989).

 $^{^{182}\,}See$ Wash. Rev. Stat. § 47.28.090.

 $^{^{183}}$ New Orleans Rosenbush Claims Service v. City of New Orleans, 653 So. 2d 538, 544 (La. 1995) (applying La. Stat. Ann. – R.S. 38:2214).

¹⁸⁴ Starlight Homes, Inc. v. Jefferson Parish Council, 632 So. 2d 3, 4 (La. 1994); reconsideration denied, 638 So. 2d 1079 (1994) (prior to amendment of statute, court held that rejection of all bids did not require a showing of just cause, as rejection of low bidder would require).

 $^{^{185}}$ See, e.g., Cal. Pub. Cont. Code $\$ 10185; Colo. Rev. Stat. $\$ 24-92-105 (1998).

 $^{^{186}}$ Vining Disposal Service v. Board of Selectmen of Westford, 416 Mass. 35, 616 N.E.2d 1065, 1067 (1993).

¹⁸⁷ New Orleans Rosenbush Claims Service v. City of New Orleans, 653 So. 2d 538 (La. 1995) (at end of 30-day period for agency to award contract, mandamus will lie to compel award).

 $^{^{188}}$ Fort Howard Co. v. Department of Management Services of State of Florida, 624 So. 2d 783, 784 (Fla. App. 1 Dist. 1993).

¹⁸⁹ Gannett Outdoor Co. v. City of Atlantic City, 249 N.J. Super. 217, 592 A.2d 276, 278 (1991).

 $^{^{190}}$ Hankins v. Police Jury, 152 La. 1000, 95 So. 102 (La. 1922).

 $^{^{191}}$ Williams v. City of N.Y., 118 A.D. 756, 104 N.Y.S. 14 (1907), $\it aff'd$ 192 N.Y. 541, 84 N.E. 1123 (1908); Marshall Constr. Co. v. Bigelow, 29 Haw. 641 (1927).

 $^{^{192}}$ Charles L. Harney, Inc. v. Durkee, 107 Cal. App. 2d 570, 237 P.2d 561 (1951).

 $^{^{193}}$ Schull Constr. Co. v. Board of Regents of Educ., 79 S.D. 487, 113 N.W.2d 663, 3 A.L.R. 3d 857 (1962).

 $^{^{194}}$ Clark Construction Co. v. Pena, 930 F. Supp. 1470 (M.D. Ala. 1996).

 $^{^{195}}$ Id. at 1492 ("the ADOT must resubmit Clark Construction's original bid and the FHWA must concur and/or approve said bid"). The court also noted that its holding vindicated ADOT's original position. Id. at n.19. See also 23 U.S.C. § 112(b)(1).

 $^{^{196}}$ Id. at 1491.

 $^{^{197}}$ RADVA Corp. v. United States, 17 Cl. Ct. 812, 818–19, $aff^2d,\,914$ F.2d 271 (1989).

hoping to get a bid for the same amount as a low bid that had been properly rejected as nonresponsive. ¹⁹⁸ Also, a board that had authority to negotiate with the lowest bidder could not do so after notifying all other bidders that all bids were being rejected and that the project would be readvertised. ¹⁹⁹ In another case, however, the court held that the expectation of attaining better bids for surplus property constituted a rational basis for rejecting all bids. ²⁰⁰ Also, a New Jersey court found that a concern for obtaining lower bids was an adequate reason to reject all bids. ²⁰¹

iv. Right of Low Bidder to Award of Contract-Throughout the process of awarding contracts through competitive bidding, public contracting agencies must act in accordance with due process. Accordingly, rejection of the lowest bid received may be challenged as taking or injuring the bidder's right to the contract award.202 Where it appears that a contractor has a legitimate property right or liberty interest that is entitled to protection, due process requires that the contracting agency grant a hearing in which the rejected bidder is told the reasons for the action and has an opportunity to answer and explain the agency's concerns.²⁰³ Due process protections are required only where property rights or liberty interest are involved, however, and neither courts nor legislatures have been inclined to recognize that every unsuccessful bidder has lost the right to pursue a livelihood when it is not awarded a contract in a properly conducted competition.204 On the other hand, an agency's actions or written materials may serve to create an entitlement to due process, where it has represented that contracts will always be awarded to the lowest responsible bidder.²⁰⁵

v. Rejection of Low Bidder.—The process of receiving, recording, and accepting bids; determining the lowest responsible bidder; and awarding a contract on the basis of that determination has been characterized as being judicial or quasi-judicial in nature, and not merely a ministerial function.²⁰⁶ Accordingly, courts have been cautious about overruling contracting authorities in the exercise of discretion.207 There is a presumption that the power and discretion of government officials in awarding bids has been properly exercised.²⁰⁸ As a rule, agency decisions are not upset except where the challenger shows that fraud, deceit, or flagrant abuse of discretion has prejudiced the competitive bidding.209 Within a wide range of lawful methods, administrative discretion is permitted to control selection of the lowest responsible bidder, just as it is accepted in determining the prequalification of bidders. As in the case of prequalification of bidders, courts reserve the right to intervene where it appears that abuse of discretion may threaten the policy of competitive award of public contracts.

Determination of the lowest responsible bidder is an "exercise of *bona fide* judgment, based upon facts tending reasonably to the support of such determination." However, contracting agencies may be challenged for arbitrary and capricious action where circumstances suggest that this may have been the case. ²¹¹ The agency has an implied contractual duty to consider solicited bids in a fair and honest manner. ²¹² Thus, when the agency's decision to reject the low bid is challenged, the standard of review is whether the agency acted fraudulently, arbitrarily, illegally, or dishonestly. ²¹³ The fact that the agency acts in error may not be sufficient to overturn its decision under this standard. In one case, the agency's own erroneous estimate was the basis for rejection of all bids, yet because there was no evidence

¹⁹⁸ Petricca Constr. Co. v. Com., 37 Mass. App. Ct. 392, 640 N.E.2d 780, 782 (1994).

 $^{^{199}}$ Building and Constr. Trades Council of Northern Nevada v. State $ex\ rel.$ Public Works Bd., 108 Nev. 605 (1992), 836 P.2d 633, 636.

 $^{^{200}}$ Feldman v. Miller, 151 A.D. 2d 755, 542 N.Y.S.2d 777 (1989).

 $^{^{201}}$ Marvec Constr. Corp. v. Township of Belleville, 254 N.J. Super. 282, 603 A.2d 184, 187 (1992).

²⁰² Compare LaCorte Elec. Constr. and Maintenance v. County of Rensselaer, 152 Misc. 2d 70, 574 N.Y.S.2d 647, 649 (1991) (low bidder has liberty interest but not property interest in award of contract) with Scott v. Buhl Joint School Dist. No. 412, 123 Idaho 779, 852 P.2d 1376, 1384 (1993) (low bidder has property interest in contract award).

 $^{^{203}}$ Id.; Triad Resources and Systems Holdings v. Parish of Lafourche, 577 So. 2d 86, 89, $writ\ denied,$ 578 So. 2d 914 (La. App. 1 Cir. 1990) (bidder whose bid is substantially unresponsive is not entitled to due process).

²⁰⁴ See Envirologix Corp. v. City of Waukesha, 192 Wis. 2d 277, 531 N.W.2d 357, 364 (1995) (statutory bid requirements are intended to benefit public and low bidder has no fixed right to award of contract).

²⁰⁵ Pataula Elec. Membership Corp. v. Whitworth, 951 F.2d 1238, 1242 (11th Cir. 1992) (Georgia law recognizes that the lowest responsible bidder may have a property interest in award of the contract, based on agency's "vendor manual" that

stated that "contracts or open-market purchases will in all cases be awarded to the lowest responsible bidder." This was sufficient to create an entitlement.).

 $^{^{206}}$ Even when public bidding and contract award is carried out by a legislative body, the same standard applies; the legislative body is not afforded the same level of discretion that it is in legislative actions. Pittman Constr. Co. v. Parish of East Baton Rouge, 493 So. 2d 178, 181 (La. App. 1 Cir. 1986) $writ\ denied$, 493 So. 2d 1206.

²⁰⁷ Great Lakes Heating, Cooling, Refrigeration and Sheet Metal Corp. v. Troy School Dist., 197 Mich. App. 312, 494 N.W.2d 863 (1992).

 $^{^{208}}$ Colonnelli Bros. v. Village of Ridgefield Park, 284 N.J. Super. 538, 665 A.2d 1136 (1995).

 $^{^{209}}$ Ghilotti Constr. Co. v. City of Richmond, 45 Cal. 4th 897, 903, 53 Cal. Rptr. 2d 389, 392 (Cal. App. 996).

 $^{^{210}}$ Inge v. Bd. of Pub. Works, 135 Ala. 187, 33 So. 678, 681 (1902).

 $^{^{211}}$ Catamount Constr., Inc. v. Town of Pepperell, 7 Mass. App. 911, 388 N.E.2d 716 (1979).

 $^{^{212}}$ Kila, Inc. v. State, Dep't of Admin., 876 P.2d 1102, 1105 (Alaska 1994).

 $^{^{213}}$ Overstreet Paving Co. v. State, Dep't of Transp., 608 So. 2d 851, 852–53 (Fla. App. 2 Dist. 1992).

of fraud or arbitrary action, the agency was not required to accept the low bid. 214

In one case, the award to the second lowest bidder was held to be arbitrary since the contracting agency acted contrary to the preponderance of the evidence in the bids, and appeared to be persuaded by the fact that the second lowest bidder had had similar contracts for the agency in the past.²¹⁵ In other instances, however, judicial review has upheld the contracting agency's action in rejecting low dollar bids for reasons bearing on the bidder's responsibility²¹⁶ and bid responsiveness.²¹⁷

²¹⁷ International Telecommunications Systems v. State, 359 So. 2d 364 (Ala. 1978) (low bidder's samples failed tests for specifications); E.M. Watkins & Co. v. Board of Regents, 414 So. 2d 583 (Fla. App. 1982) (low bidder's material variance with bidding instructions determined to give it advantage over other bidders); Conduit and Foundation Corp. v. City of Philadelphia, 41 Pa. Commw. 641, 401 A.2d 376 (Pa. Commw. 1979) (low bidder's material variance with bidding instructions determined to adversely affect other bidders); William v. Board of Supervisors, of Louisiana State Univ. Agric. and Mechanical College, 388 So. 2d 438 (La. App., 1980) (irregular and incomplete bid); Gibbs Constr. Co. v. Board of Supervisors of Louisiana State Univ., 447 So. 2d 90 (La. App. 1984) (attendance at pre-bid conference); Monoco Oil Co. v. Collins, 96 Misc. 2d 631, 409 N.Y.S.2d 498 (1978) (failure to describe pricing formula): Land Constr. Co. v. Snohomish County, 40 Wash. App. 480, 698 P.2d 1120 (1985) (failure to list certified women's business enterprise as a subcontractor in violation of bidding instructions); Kuhn Constr. Co. v. State, 366 A.2d 1209 (C. Cl., Del. Ch. 1976) (failure to list specialty subcontractors held to be material to statutory requirement for bidding, and omission cannot be waived without encouraging bid shopping); LeCesse Bros. Contracting v. Town Board of Town of Williamson, 62 A.D. 2d 28, 403 N.Y.S.2d 950 (1978) (failure to give names of manufacturers of equipment as required in bid instructions); L. Pucillo & Sons, Inc. v. Mayor and Council of Borough of New Milford, 73 N.J. 349, 375 A.2d 602 (1977) (failure to bid on 5-

The extent of a contracting agency's discretion in basing contract awards on factors other than dollar cost is limited by the terms of the advertised specifications and bidding instructions, and the agency may not utilize extraneous factors. The validity of a contract may be questioned if the bid documents are indefinite or misleading, and capable of being interpreted in different ways by different contractors. If an irregularity in the bid documents contributes to contractors submitting bids on different terms or with unequal information, the bidding process and any contract awarded will be considered invalid. 218 Where the specifications for a construction project did not give any date for completion of the desired work, or state that the length of construction time would be a determining factor in the award, it was held that that contracting agency acted arbitrarily in using that factor to reject the lowest bid in favor of a higher one that called for an earlier completion date.²¹⁹ In another case, it was held to be arbitrary for an agency to induce bidders to submit high quality offers, implying that selection would be made on the basis of best value, and then reject the highest quality offer on the basis of a relatively insignificant price difference.²²⁰

On the other hand, where matters are clearly stated in the specifications or bidding instructions as being necessary for the performance of the contract or pertinent to the selection of a contractor, courts generally uphold rejection.²²¹ Bids must conform to the bid specifications in all material respects. However, not every deviation will cause an agency to find a bid to be found nonresponsive. The deviation must be substantial and must give the bidder an advantage over competitors.²²² Thus, when a bidder failed to include the time for project completion, supply pertinent data that affected budget considerations, and include an affirmative action plan, its bid was properly rejected as nonresponsive. 223 Errors such as lack of a corporate resolution or a signature of an authorized individual authorized to bind the bidder to a contract will also be considered a substantial error that renders the bid nonresponsive.²²⁴ A further discussion of nonresponsive bids is contained

 $^{^{214}}$ Department of Transp. v. Groves-Watkins Constructors, 530 So. 2d 912 (Fla. 1988).

²¹⁵ Berryhill v. Dugan, 89 Commw. 46, 491 A.2d 950, 952 (Pa. Commw. Ct. 1985).

²¹⁶ Turnkey Constr. Corp. v. City of Peekskill, 51 A.D. 2d 729, 379 N.Y.S.2d 133 (1976) (lack of experience in building construction, insufficient financial resources, and reason to believe that if awarded the contract bidder intended to assign it to another for performance); L&H Sanitation v. Lake City Sanitation, 585 F. Supp. 120 (E. D. Ark. 1984) (bidder only recently organized and not incorporated at time of bid, lacked any experience in proposed construction, submitted a contingent bid); John Carlo, Inc. v. Corps of Engineers, 539 F. Supp. 1075 (N. D. Tex. 1982) (lack of integrity of bidder's present officers and association with contractors having unsatisfactory records of integrity and performance); Keyes Martin & Co. v. Director, Division of Purchase and Property, 99 N.J. 244, 491 A.2d 1236 (1985) (recent publicity on possible conflict of interest deemed sufficient to conclude that award to lowest bidder would undermine public confidence); Automatic Merchandising Corp. v. Nusbaum, 60 Wis. 2d 362, 210 N.W.2d 745 (1973) (second lowest bidder offered greater amount of new equipment than lowest bidder); Cave-of-the-Winds Scenic Tours, Inc. v. Niagara Frontier State Park and Recreation Comm'n, 64 A.D. 2d 818, 407 N.Y.S.2d 301 (1978).

year contract option in addition to 1, 2, and 3-year options was not minor irregularity that could be waived, but rather was substantial departure from instructions).

 $^{^{218}}$ Brewer Envtl. Indus. v. A.A.T. Chemical, 73 Haw. 344, 832 P.2d 276, 278 (1992).

 $^{^{219}}$ Gerard Constr. Co. v. City of Manchester, 120 N.H. 391, 415 A.2d 1137 (1980).

 $^{^{220}}$ Late coere Int'l. v. U.S. Dep't of the Navy, 19 F.3d 1342, 1360 (11th Cir. 1994).

²²¹ See, e.g., City of Philadelphia v. Canteen Co., Div. of TW Services, Inc., 135 Pa. Commw., 575, 581 A.2d 1009, 1013 (1990) (failure to follow bid instructions rendered bid nonresponsive).

 $^{^{222}}$ Kokosing Constr. Co. v. Dixon, 72 Ohio App. 3d 320, 594 N.E.2d 675, 680 (1991).

²²³ Id. 594 N.E.2d at 680.

 $^{^{224}}$ Stafford Constr. Co. v. Terrebonne Parrish School Bd., 560 So. 2d 558, 560 (La. App. 1 Cir. 1990).

in Section 2.B.2.d. of this volume. Such an error could be used by a bidder to withdraw its bid after bid opening, giving it an unfair advantage over other bidders who could not do the same thing without forfeiting their bid bonds. The bidder bears the risk that its bid might contain a nonwaivable error; the contracting agency is under no duty to examine bids for errors and inform bidders accordingly.

After bid opening, the agency may not allow bidders to correct substantive errors. Some states prohibit this by statute, as in Illinois: "After bid opening, no changes in bid prices or other provisions of bids prejudicial to the interest of the State or fair competition shall be permitted."²²⁷

However, this does not mean that communication between agency personnel and bidders is not allowed after bid opening. The agency may have a duty to contact a bidder to confirm a bid if the agency suspects that there is a mistake.²²⁸ In Clark Construction Company v. Pena, it was discovered after bid opening that ADOT had omitted a traffic control note from the plans and specifications.229 ADOT contacted the bidder, who assured ADOT that the omission of the note would have no effect on its bid. FHWA then refused to concur in the award to Clark, contending among other things that the communication amounted to "reverse bid rigging" under an FHWA policy memorandum. The court held that FHWA's and ADOT's rejection of Clark as the low bidder was without a rational basis, and found that the communication was not an attempt by ADOT to gain a price reduction but rather was a means of evaluating the materiality of the omission.²³⁰

However, any attempt by the agency or the contractor to negotiate after the opening of bids is generally found to be improper, at least in the absence of a statute that permits negotiation with the low bidder.²³¹ The contract may be found invalid where post-bidding negotiations with the apparent low bidder result in award-

ing a contract on specifications that have been altered from those originally advertised.²³² Courts have been clear on the issue that a contract cannot be awarded on terms that are different from those in the invitation for bids.²³³ This rule is based on one of the underlying policies of competitive bidding-assurance against favoritism, fraud, and corruption. In order to effectively guard against favoritism and corruption, all bidders must be equally situated, and there must be a common standard for evaluating bids. A contracting agency may not contract, even with the low bidder, for terms that were not included in the bid specifications.²³⁴ Thus a low bidder could not attempt to modify its bid and attempt to negotiate a more favorable contract for itself, since to do so would give the bidder an unfair competitive advantage over other legitimate bidders, and post-bid negotiations would violate competitive bidding.²³⁵ For federally aided projects, 23 C.F.R. § 635.113 prohibits negotiation with contractors following the opening of bids and before the award of the contract.

In Arkansas Highway and Transportation Department v. Adams, the transportation department's refusal to negotiate with the low bidder was upheld, as was the department's rejection of the low bid because of its failure to include either a unit price or an extended price on a specified item.²³⁶ It was therefore impossible for the agency to discern what the unit price for that item was. The court noted that the department's published specifications authorized it to reject a bid that lacked a unit price on a bid item and that the department had a policy of not accepting a bid from which a unit price for a bid item could not be determined.²³⁷ Where the agency's specifications or regulations are rational, then the fact that the bidder did not follow them must be considered a "rational basis" for rejecting a bid.

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²²⁵ But see Leaseway Distribution Centers v. Dep't of Admin. Servs., 49 Ohio App. 3d 99, 550 N.E.2d 955, 960 (1988) (even though signature was missing from cover page as required, signature on addendum was adequate to bind the bidder to its bid as addendum was part of bid documents).

²²⁶ Dep't of Transp. v. Ronlee, Inc., 518 So. 2d 1326, 1328–29 (Fla. App. 3 Dist. 1987), review denied, 528 So. 2d 1183 (1988) (it was not inequitable for agency not to have informed bidder of bid error of less than 2 percent where bidder also discovered error on its own).

²²⁷ 30 Ill. Comp. Stat. 500/20-10(f) (2001).

 $^{^{228}}$ ABA Model Code, supra note 59, at \S 3-202(6) and commentary.

²²⁹ 895 F. Supp. 1483 (M.D. Ala. 1995).

 $^{^{230}}$ *Id.* at 1491.

 $^{^{231}}$ See Building and Constr. Trades Council of Northern Nevada v. State ex rel. Public Works Bd., 108 Nev. 605, 836 P.2d 633, 636 (1992) (statute allows Public Works Board to negotiate with low bidder after it has notified other bidders that their bids have been rejected, that the project will not be rebid, and that it intends to negotiate with low bidder, citing N.R.S. 341.145(3)).

²³² Thelander v. City of Cleveland, 3 Ohio App. 3d 86, 444 N.E.2d 414, 427 (1981).

²³³ Palamar Constr. v. Township of Pennsauken, 196 N.J. Super. 241, 482 A.2d 174, 179 (A.D. 1983). The court held, however, that attachment of post-bid conditions by the agency that were more favorable to the agency was allowed if the contractor agreed to the conditions; the bidder was not required to concede to the added conditions as it was entitled to the contract as it had been bid. 482 A.2d at 181. See also Transactive Corp. v. N.Y. State Dep't of Social Services, 665 N.Y.S.2d 701, 705 236 A.D. 2d 48 (N.Y. App. 1997) (post-bid negotiations are proper if they do not involve a departure from the original specifications or require any concessions to the low bidder).

²³⁴ See Ariz. Board of Regents ex rel. Univ. of Ariz. v. Main Street Mesa Assocs., 181 Ariz. 422, 891 P.2d 889, 893 (Ariz. App. Div. 1 1994) review denied (1995) (where sale of public land was governed by competitive bidding laws, the agency may not negotiate with the high bidder for terms not included in the bid specifications; court's holding was based on general rule of competitive bidding that agency may not negotiate with lowest bidder for terms that materially depart from the invitation for bids).

 $^{^{235}}$ Lake Constr. & Dev. Corp. v. City of N.Y., 221 A.D. 2d 514, 621 N.Y.S.2d 337, 338 (1995).

²³⁶ 300 Ark. 16, 775 S.W.2d 904, 905–06 (1989).

 $^{^{237}}$ Id. at 905.

The Arkansas court in *Adams* noted that the agency had previously waived the defect of failure to include a unit price where the unit price could be derived from the extended price. However, in Louisiana, the result was the opposite in *V.C. Nora, Jr. Building and Remodeling, Inc. v. State Department of Transportation and Development.*²³⁸ The court held that based on the strict language of the statute, the agency did not have discretion to waive the failure to include a unit price, even though the unit price could be derived from the extended price.²³⁹ The statute stated: "The provisions and requirements of this Section, those stated in the advertisement for bids, and those required on the bid form shall not be considered as informalities and shall not be waived by any public entity."²⁴⁰

The court noted that this was a harsh result, but found that the strict language of the statute left the agency with no discretion to waive such a defect in the bid.²⁴¹

i. Determination of Lowest and Best Bidder

One state statute adds "best" to the lowest responsible bidder determination. Section 24-02-23 of the North Dakota Century Code provides that every contract over \$50,000.00 must be awarded to the responsible bidder submitting the lowest and best bid. Unfortunately, there are no reported cases in North Dakota interpreting this best bid statute. Similar best bid provisions are, however, contained in bidding statutes in Ohio. The best bidder provisions permit the owner to evaluate more than price and allow consideration of other factors spelled out in the solicitation. The word "best" is understood to refer to the qualifications of the bidder to perform the work. "Best" conveys discretion on the awarding authority to consider quality, feasibility, and qualifications of the bidder in addition to the price. In United States Wood Preserving Co. v. Sundmaker, 186 F. 678. 693 (Ohio, 1998), the Sixth Circuit Court of Appeals upheld the Ohio best bidder case law and the municipalities' acceptance of a higher "best bid." In *Prime Contractors*, Inc. v. City of Girrad, the Court of Appeals of Ohio upheld a public works best bidder determination, indicating that the municipality did not abuse its discretion.²⁴² The court noted that a municipal corporation is not automatically required to award to the company submitting the lowest bid, but is allowed to engage in a qualitative analysis as to which bidder is better. The court found no abuse of discretion, since the criteria upon which the decision was based was set forth in the bidding proposal. Further, the Supreme Court of Ohio, in City of Dayton ex rel. Scandrick v. McGee, rejected a lowest and best bidder determination

because the City applied an unannounced residency requirement not contained in the solicitation, which the Court found to be an abuse of discretion.²⁴³ In summary, use of the "best bidder" language can provide public transportation agencies with more discretion in their bid determinations, provided that this is statutorily authorized, and that the criteria and factors are disclosed and specified in the solicitation documents.

j. Effect of Failure to Follow Required Procedures

Bidding procedures set forth in statutes and administrative rules are regarded as jurisdictional prerequisites for valid exercise of a contracting agency's authority. Courts have made it plain that they seek constructions of these rules that will fully carry out the intent of the law in varying situations, but will not weaken the effectiveness of the law through exceptions. Thus, the agency's failure to comply with all the specified steps before an award may result in failure to create any enforceable obligation or liability on the part of the public agency. Where an agency does not follow exactly its specified procedures, the resulting contract is void.²⁴⁴

Abuse of discretion may be found when a contracting agency fails to furnish enough or the right sort of guidelines and instructions for bidders, which could prejudice the entire bidding process.²⁴⁵ For example, an agency that did not disclose its policy of preferring resident bidders until after bid opening was held to have modified its requirements without proper notice to bidders.246 In another case, the award was set aside and the agency was required to readvertise the contract where the bid specifications gave incorrect directions to bidders regarding the required amount of the bid bond.²⁴⁷ The specifications did not state that the amount of the bid bond would be 10 percent of the contract price, not to exceed \$20,000, as the statute reguired. Rather, they required 10 percent of the bid amount, which in the case of some bids was over \$40,000. Some contractors had referred instead to the statute, providing only the \$20,000 statutory bond amount. The court held that this gave some bidders an advantage over others, and set aside the award.²⁴⁸

In other cases, the agency's own handling of the bids and of the award process may result in a material de-

²³⁸ 635 So. 2d 466 (La. App. 3 Cir. 1994).

 $^{^{239}}$ Id. at 472.

 $^{^{240}}$ LSA-R.S. 38:2212(A)(1)(b) (2000).

 $^{^{241}\} See$ Section 5, infra, for further discussion of waivable and non-waivable errors.

²⁴² 101 Ohio App. 3d 249, 655 N.E.2d 411 (1995).

²⁴³ 67 Ohio St. 2d 356, 423 N.E.2d 1095 (1981).

²⁴⁴ Failor's Pharmacy v. Dep't of Social and Health Servs., 125 Wash. 2d 488 886 P.2d 147, 153 (1994) (failure to comply with statutorily mandated procedures is ultra vires and renders contract void); see also Spiniello Constr. Co. v. Town of Manchester, 189 Conn. 539 456 A.2d 1199, 1202 (1983); Terminal Constr. Corp. v. Atlantic County Sewerage Auth., 67 N.J. 403, 341 A.2d 327 (1975).

 $^{^{245}}$ Dayton, $ex\ rel.$ Scandrick v. McGee, 67 Ohio St. 2d 356, 423 N.E.2d 1095 (1981).

²⁴⁶ Id. 423 N.E.2d at 1097.

²⁴⁷ Waste Disposal, Inc. v. Mayor and Council of Borough of Roselle Park, 145 N.J. Super. 217, 367 A.2d 449 (1976).

²⁴⁸ Id. 367 A.2d at 450.

viation from bidding laws. For example, the court in a New Jersey case found that even though the agency had posted bids on an electronic bulletin board shortly after bid opening, the agency's failure to total bid items and announce the bid totals warranted rejection of bids.²⁴⁹ In another case, where the agency's bid documents indicated that it would accept the unit item price where there was a discrepancy between the unit price and the total, it was held to be an error to reject the low bidder whose unit price was not ambiguous.²⁵⁰

Contractors who perform construction work or supply materials under an innocent impression that their contracts were awarded through correct procedures understandably complain of the hardship resulting from application of this rule. But even where the public agency accepts and uses the results of a contractor's work, the contractor may not recover in quantum meruit.251 Allowing recovery in quantum meruit where the bidding requirements have been violated would undermine the policies of competitive bidding. In addition, the contractor may be required to repay to the agency any funds received under the arrangement. This is particularly so where the public contract has been obtained through fraud or corruption, whether on the part of the agency official or the contractor.²⁵² This harsh result has been found to be necessary to deter corruption and collusion in bidding.²⁵³

Apparent exceptions to this rule have been noted, chiefly where courts have been able to find factual bases for enforcing an implied contract, or have found that in addition to noncompliance with bidding statutes, there was proof of fraud in the award.²⁵⁴ In the absence of such findings, however, contractors have little prospect of recovering for work performed because theories of quasi-contract will not be applied to promises that are beyond the authority of a public agency to make.

Failure of a contracting agency to follow mandatory procedures in conducting bidding and award of contracts has been alleged in a variety of situations. An award was challenged where the agency did not compel the successful bidder on a highway construction contract to give assurance that it would pay prevailing wage rates as required by state law.²⁵⁵ Also, the contracting agency's award was protested where the agency accepted an apparently late bid upon the bidder's claim that the bid clock was fast, and thereafter failed to notify the apparently successful bidder of a bid protest.²⁵⁶

k. Permissible Types of Combined Bidding by Contractors

In contrast to combinations that arise from collusion, other types of combinations for purposes of bidding are permitted. Where contracting agencies have projects that are unusually large, or that have an unusually wide range of specialty requirements, it may be impossible for one contractor to undertake the work desired in a single contract. Under these circumstances, joint bids by contractors who combine their resources to organize and perform this work provide a sensible solution.

Courts' acceptance of the practice of joint bidding by contractors has emphasized the distinction between these open agreements and the secrecy typically associated with collusive combinations. An early decision of a New York court illustrates this view:

[A] joint proposal, the result of honest cooperation though it might prevent the rivalry of the parties, and thus lessen competition, is not an act forbidden by public policy. Joint adventures are allowed. They are public and avowed and not secret. The risk as well as the profit, is joint and openly assumed. The public may obtain at least the benefit of the joint responsibility, and of the joint ability to do the service. The public agents know, then, all that there is in the transaction, and can more justly estimate the motives of the bidders and weigh the merits of the bid.²⁵⁷

Subcontracts and joint ventures are both subject to scrutiny to assure that they are genuine, because either technique can be abused and become a threat to fair competition. It is contrary to public policy for bidders on a public works project to agree that some of them will refrain from bidding in favor of others. It is also contrary to many states' public bidding laws, as in Kentucky: "Any agreement or collusion among bidders or prospective bidders which restrains, tends to restrain, or is reasonably calculated to restrain competition by agreement to bid at a fixed price, or to refrain from bidding, or otherwise, is prohibited." ²⁵⁸

 $^{^{249}}$ Statewide Hi-Way Safety, Inc. v. N.J. Dep't of Transp., 283 N.J. Super. 223, 661 A.2d 826 (A.D. 1995) (dismissed as moot, but DOT's argument was rejected as to future cases).

 $^{^{250}}$ Pozar v. Dep't of Transp., 145 Cal. App. 3d 269, 193 Cal. Rptr. 202, 203 (1983).

²⁵¹ J & J Contractors/O.T. Davis Constr., A.J.V. v. State, by Idaho Transp. Board, 118 Idaho 535, 797 P.2d 1383, 1384–85 (1990) (contractor may not recover if contract is void, as opposed to voidable); Trujillo v. Gonzales, 106 N.M. 620, 747 P.2d 915, 917 (1987) (violation of Open Public Meetings Act); Lanphier v. Omaha Public Power Dist., 227 Neb. 241, 417 N.W.2d 17, 21 (1987) (quantum meriut was available to the contractor where the city had authority to contract, but not where there was no authority).

 $^{^{252}}$ Curiale v. Capolino, 883 F. Supp. 941 (S.D.N.Y. 1995). However, in $J \& J \ Contractors, supra$ note 251, the agency was prevented from recovering what it had paid the contractor because it had not appealed the determination made by the hearing officer on the contractor's claim. 797 P.2d at 1385.

 $^{^{253}}$ *Id.* at 951.

²⁵⁴ Gerzof v. Sweeney, 16 N.Y.2d 206, 211 N.E.2d 826, 264 N.Y.S.2d 376 (1965), *cited in Curiale v. Capolino*, 883 F. Supp. 941 (S.D.N.Y. 1995).

 $^{^{255}}$ Lynch v. Devine, 45 Ill. App. 3d 743, 359 N.E.2d 1137 (1977).

²⁵⁶ Washington Mechanical Contractors v. United States Dep't of the Navy, 612 F. Supp. 1243 (N.D. Cal. 1984).

 $^{^{257}\,}Atcheson$ v. Mallon, 43 N.Y. 147, 151 (1870).

²⁵⁸ Ky. Rev. Stat. § 45A.325 (1999).

i. Joint Ventures.—Where construction work is carried out under a single contract, unusually large or complex projects may require assembling financial resources and administrative or technical workers on a scale greater than any single contractor can provide through its own efforts and resources, or through its own staff plus the use of subcontractors. A practical accommodation of the rules of competitive bidding to the needs of contractors and contracting agencies is offered in the practice of accepting bids from two or more contractors acting in a joint venture. In this type of bid, groups of contractors combine their assets, plant, and personnel in a joint effort.

Joint ventures are similar to ordinary business partnerships. The parties share the work, the prospects of profits, and the risks of loss. The terms on which the parties share the responsibilities and results of the work are set forth in written agreements.²⁵⁹ The main difference is that joint ventures are created to perform one specific job, whereas partnerships are continuing arrangements.²⁶⁰ In establishing a joint venture, it is not enough to merely adopt a particular joint name. One seeking to prove that a joint venture exists must show that there is a community of interest in the venture between the two contractors, an agreement to share the profits and losses in a project, and a mutual right of control or management over the project.261 A joint venture is not a legal entity apart from the two or more contractors comprising it. A joint venture was not a "resident" for the purpose of taking advantage of a state preference statute where neither of the two joint venturers were resident corporations.²⁶²

Remedies available to the parties in the event of a dispute are generally the same as those applicable to partnerships, with some differences. Among partners, the usual remedy is for the aggrieved partner to sue for an accounting. However, in joint ventures, one may sue the other for breach of the contract defining the terms of their cooperative undertaking, or for contribution to the plaintiff's losses.²⁶³

Joint venture bidding is permitted so long as it is a bona fide cooperative effort among its parties. Joint venture bids must fully disclose the terms of the cooperative effort the parties will undertake. Secret agreements under which several contractors undertake to share the work, risks, and profits of a project are not proper or enforceable, regardless of whether they result in a single bid for the parties to the arrangement or separate bids by all parties according to a prearranged plan.²⁶⁴

Joint venture bids have the advantage of pooling the capacity of several contractors and allowing prequalification for projects that no one of them is capable of performing individually. When such bids are filed, the bid should indicate what percentage of the dollar amount of the contract should be debited against the prequalification capacity rating of each joint venture. Where bidders do not allocate the proportions to be debited, the contracting agency should make this determination as it deems to be in its own best interest. Apportionment of the prequalification capacity rating debit among the parties to a joint venture bid does not in any way divide the responsibility of each for the execution and performance of the contract if it is awarded to them.

ii. Subcontracts.—Under a subcontract, all details of the subcontractor's work are defined in the agreement between the subcontractor and the prime contractor. The prime contractor is responsible to the contracting agency for the performance of the subcontract along with the rest of the contract work, except as to those requirements that state or federal law imposes directly and individually on both the prime contractor and the subcontractor. An example of such a requirement is the Contract Work Hours and Safety Standards Act, which requires both the prime and subcontractors to comply with federal standards for hours of work and worker safety.²⁶⁵

l. Competitive Bidding Requirements for Federal and Federally Aided Highway Construction Contracts

Selection of contractors for federal agency construction projects is governed by the requirements of 41 U.S.C. § 5, which provides that, unless otherwise specified in appropriation legislation or unless they come within an authorized exception, contracts for materials, supplies, or services for the government must be awarded through public advertisement and competitive bidding. The authorized exceptions to this rule include contracts in which 1) the amount involved does not exceed \$25,000; 2) immediate delivery of materials or performance of services is required because of "public exigencies"; 3) only one source of supply is available; or (4) the services required must be performed by the contractor in person and are of a technical or professional nature, or are under government supervision and paid for on a time and materials basis.266

A similar statute applies to federal-aid highway projects where construction is performed under contracts awarded by a state highway agency or a local govern-

²⁵⁹ But see Libby v. L.J. Corp., 247 F.2d 78 (D.C. Cir. 1957) (existence of a joint venture may be implied from the parties' conduct even if not in writing).

 $^{^{260}}$ Ben Fitzgerald Realty Co. v. Muller, 846 S.W.2d 110, 120 (Tex. App. 1993).

²⁶¹ *Id.* at 121.

²⁶² Bristol Steel and Iron Works v. State, Dep't of Transp. & Dev., 504 So. 2d 941 (1987), writ granted, 505 So. 2d 1131 and 505 So.2d 1132, rev'd 507 So. 2d 1233 (1987) (finding that one of joint venturers was resident and that employee stock option plan did not constitute a "change in ownership" so as to form basis for finding that contractor did not meet statutory requirement of not having had change in ownership in previous 2 years in which it had state license).

 $^{^{263}}$ Alpine Constr. Co. v. Gilliland, 178 N.W.2d 530, 23 Mich. App. 275 (1970).

²⁶⁴ Hoffman v. McMullen, 83 F. 372 (9th Cir. 1897).

²⁶⁵ 40 U.S.C. §§ 327–333(a) (1999).

²⁶⁶ 41 U.S.C. § 5 (1999).

ment using federal funds.²⁶⁷ Exceptions to this requirement are not specified in the statute, as in the case of direct federal construction. However, the Secretary of Transportation is authorized to approve modifications of the usual methods of advertisement for proposals, provided that those methods "shall be effective in securing competition."²⁶⁸ Alternatives to public bidding may be allowed where the state demonstrates that another method is more cost effective or that an emergency exists.²⁶⁹

FHWA regulations applying to projects that are in any part paid for with federal funds also address competitive bidding requirements.²⁷⁰ These regulations require that federal-aid highway construction work must be performed by contract awarded to the lowest responsible bidder, unless it is undertaken by the state as a force account activity, or unless the agency demonstrates that either an emergency or a more costeffective method exists.²⁷¹ For work performed by contract, the state highway agency must assure the opportunity for free, open, and competitive bidding, including adequate publicity of the advertisement or call for bids, and must comply with the procedures in the regulation. State transportation agencies may not issue invitations for bids on such projects until compliance with the provisions of applicable FHWA regulations and directives is approved by the FHWA division administrator.272 Arrangements for performance of work as force account projects require that the FHWA division administrator find that those arrangements are cost effective, and that the state determine that the project can be staffed and equipped satisfactorily and cost effectively.²⁷³

FHWA regulations limit the extent to which subcontracting may be used and specify that prime contractors must perform at least 30 percent of the total contract price with their own personnel.²⁷⁴ However, if any of the contract work requires "highly specialized knowledge, abilities or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid on the contract," that work may be designated as specialty work and may be deducted from the total contract price before computing the amounts for prime and sub contractors to perform.²⁷⁵

The minimum time for advertisement of bids is prescribed by federal regulations as 3 weeks prior to the date for opening bids, except where shorter periods may be justified by special circumstances and approved by the FHWA division administrator.²⁷⁶ Prior approval of the administrator must also be obtained if the agency issues any addenda setting out major changes to the approved plans and specifications during the advertising period, and the state transportation agency is required to give specific assurance that all bidders received such addenda.²⁷⁷

A bidder must file an affidavit that it did not engage in any action in restraint of free competitive bidding in connection with the contract being awarded.²⁷⁸ Finally, in the interest of increasing small business participation in federal-aid highway construction, state transportation agencies must schedule contract lettings in "balanced programs" as to size and type of contracts to assure opportunities for all sizes of contractors to compete in the federal-aid program.²⁷⁹

m. Exceptions to the Competitive Bidding Rule

Statutes and regulations specify certain circumstances in which competitive bidding procedures do not apply. The most common exceptions are concerned with the amounts of money involved in a contract, the need to respond to emergency situations, and the impracticality of procuring certain services through price competition. Further discussion of emergency contracting is addressed in Section 1.A.2.n. of this volume.

i. Statutory Minimum Amounts.—Most statutes and ordinances that impose competitive bidding requirements apply only to contracts that involve more than specified minimum amounts of money. The rationale of this exception appears to be the practical consideration that when less than this minimum amount is involved, the cost of administering competitive bidding procedures is more expensive than the risk of loss to the public justifies. Minimum levels set by statute typically are low, so that only the most minor projects are within the scope of the exception. ²⁸⁰

Questionable contracting practices and ambiguities in contract language are responsible for a large share of the cases in which the application of this exception is challenged. Even with a clear statutory designation of the minimum amount required for competitive bidding, it is still possible for a contracting officer to be indefinite about the contract's total amount because unit prices rather than job prices are quoted. In such cases, evidence suggesting advance knowledge of the ultimate magnitude of the contract's cost, implying intent to circumvent the competitive bidding law, is important. Thus, where a contract was negotiated to purchase gravel at a fixed price per yard for use in road and street repair, and thereafter 74 separate purchases (each costing less than \$500) were made on identical terms over a period of 8 months, the court concluded that the arrangement violated the law requiring com-

²⁶⁷ 23 U.S.C. § 112(a) (1999).

²⁶⁸ *Id.* at § 112(b).

²⁶⁹ Id

 $^{^{270}}$ 23 C.F.R. \S 635.104 (2000).

²⁷¹ 23 C.F.R. § 635.204(a) (2000).

²⁷² 23 C.F.R. § 635.112 (2000).

²⁷³ 23 C.F.R. § 635.104 (2000).

 $^{^{274}}$ 23 C.F.R. \S 635.116 (2000).

 $^{^{275}}$ 23 C.F.R. \S 102 (2000) (definition of specialty work); 23 C.F.R. \S 635.116 (2000).

 $^{^{276}}$ 23 C.F.R. \S 112(b) (2000).

 $^{^{277}}$ 23 C.F.R. \S 112(c) (2000).

²⁷⁸ 23 C.F.R. § 112(f) (2000).

²⁷⁹ 23 C.F.R. § 107 (2000).

²⁸⁰ See App. C.

petitive bidding for all public contracts in excess of \$500.²⁸¹ Stating that the legislature could not have intended to allow its main objective to be "circumvented by multiple small open-market purchases," the court emphasized that nothing in the record indicated that the contracting agency could not and did not realize the full extent of its need for road repair material.²⁸²

Closely related to these cases are situations in which the agency has deliberately split a public construction project so that it can be performed under several contracts, some or all of which may fall below the statutory minimum amount for competitive bidding. Sound engineering, financial, and administrative reasons may support the decision to split a single project into segments for contracting. However, where it appears that this has been done for the purpose of evading a mandatory competitive bidding statute, the court may find the negotiated contracts invalid.²⁸³

ii. Specialized Personal and Professional Services.— Contracts for personal or professional services form another generally recognized exception to mandatory competitive bidding procedures.²⁸⁴ A leading case on this matter has explained the exception as follows:

The theory upon which the doctrine rests is that the competitive bidding statutes cannot be rationally or practically applied to contracts for the employment of architects or other persons whose services are required because of the special training, skill, and scientific or technical knowledge necessary to the object to be accomplished...The value of such services is not to be measured by a mere matching of dollars, so to speak; it is not to be determined upon the irrational assumption that all men in the particular class are equally endowed with technical or professional skill, knowledge, training, and efficiency, nor are such services rendered more desirable because afforded more cheaply in a competitive bidding contest. The selection of a person to perform services requiring those attributes calls for the exercise of a wise and unhampered discretion in one seeking such services, for it involves not only those attributes, but the qualities of reputation and personal and professional trustworthiness and responsibility as well.2

Similar views have been expressed about the services of artists,²⁸⁶ auditors and accountants,²⁸⁷ traffic

engineers, ²⁸⁸ and real estate appraisers. ²⁸⁹ Contracts for insurance coverage have also been held to be contracts for "extraordinary, unspecifiable services" that fall outside the requirement for competitive bidding. ²⁹⁰

Procurement of personal or professional services without competitive bidding is justified because it does not involve work that conforms to specifications that allow for contractors' performances to be evaluated by relatively objective standards. Accordingly, contracts calling for services that require personal or professional judgment, in which the contracting agency specifies an objective but not the methods of the desired work, have been exceptions to the competitive bidding mandate. This rule has been extended to include services requiring aesthetic, business, or technical knowledge and judgment, and professional or scientific skill and experience.²⁹¹

In line with this reasoning, contracts for architectural and engineering services are regularly put into this category.²⁹² Under federal law, the Brooks Architects-Engineers Act allows the solicitation of architectural and engineering services based on factors other than price:

The Congress hereby declares it to be the policy of the Federal Government to publicly announce all requirements for architectural and engineering services, and to negotiate contracts for architectural and engineering services on the basis of demonstrated competence and qualification for the type of professional services required and at fair and reasonable prices.293

Although the Brooks Act does not require prequalification of engineering and architectural firms, it does encourage federal agencies to have firms submit annual statements of qualifications.²⁹⁴ After the agency considers the qualifications of interested firms, the Act requires the hiring agency to select the three most qualified firms after "conduct[ing] discussions with no less than three firms regarding anticipated concepts and the relative utility of alternative methods of approach for

 $^{^{281}}$ Fonder v. City of Sioux Falls, 76 S.D. 31, 71 N.W.2d 618 $\left(1955\right)$

²⁸² *Id.* 71 N.W.2d at 621.

²⁸³ Miller v. McKinnon, 20 Cal. 2d 83, 124 P.2d 34 (1942).

²⁸⁴ Amherst Columbia Ambulance Service Ltd. v. Gross, 437 N.Y.S.2d 137 (1981).

²⁸⁵ Louisiana v. McIlhenny, 201 La. 78, 9 So. 2d 467, 471 (1942) (employment of landscape architect) (quoting Gulf Bitulithic Co. v. Nueces County, 297 S.W. 747, 753 (Tex. App. 1927)), reh'g denied.

 $^{^{286}}$ Adams v. Ziegler, 22 Cal. App. 2d 135, 70 P.2d 537 (1937).

 $^{^{287}}$ Cochran County v. West Audit Co., 10 S.W.2d 229 (Tex. Civ. App. 1928).

 ²⁸⁸ City and County of San Francisco v. Boyd, 17 Cal. 2d
 606, 110 P.2d 1036 (1941); Flottum v. City of Cumberland, 234
 Wis. 654, 291 N.W. 777 (1940).

Doverspike v. Black, 535 A.2d 1217, 1219, 126 Pa.
 Commw. 1 (1988) aff'd on reargument, 541 A.2d 1191, 126 Pa.
 Commw. 11 (1988); Parker v. Panama City, 151 So. 2d 469 (Fla. Dist. Ct. App. 1963).

²⁹⁰ Local 1081 of Communications Workers of America, AFL-CIO v. Essex County, 255 N.J. Super. 671, 605 A.2d 1154 (N.J. Super. A.D. 1992).

²⁹¹ Attlin Constr. v. Muncie Cmty. Sch., 413 N.E.2d 281, 287 (Ind. App. 1980), (construction manager was acting similar to architect or engineer).

²⁹² State v. Brown, 422 N.E.2d 1254, 1256 (Ind. App. 1981) (field supervision and coordination of activities at construction site performed by construction manager were professional services, and did not have to be competitively bid).

 $^{^{293}}$ 40 U.S.C. \S 542 (1999) (Brooks Architects-Engineers Act).

 $^{^{294}}$ 40 U.S.C. \S 543 (1999).

furnishing the required services."²⁹⁵ The agency may then proceed to negotiate a contract with the top qualified firm at "compensation which the agency head determines is fair and reasonable to the Government. In making such determination, the agency head shall take into account the estimated value of the services to be rendered, the scope, complexity, and professional nature thereof."²⁹⁶

Courts have not always agreed with contracting agencies that a particular contract was for personal services that should be contracted for in this manner. Contracts for architects and engineering services are usually not in question, as they will likely be covered either by the Federal Brooks Act or by a state "Little Brooks Act." In contrast, a contract to film the construction of a major highway bridge was held not to be one for "personal services."297 That contract was considered to be one for the purchase of the films rather than for professional services. A contract to manage the sale of advertising space and display facilities in an airport was also not considered a contract for specialty services.²⁹⁸ The same result occurred where a public agency contracted for inspection and enforcement of an electrical code for building construction. Denying that it could be regarded either as "professional" or "extraordinary unspecifiable services" under the state's public contracts law, the court reasoned that since inspection specifications had been issued for use in administration and enforcement of the law, the work may have required special skill but did not demand special knowledge or professional judgment and was thus subject to competitive bidding rules.²⁹⁹ In another case, contracts for feasibility studies of programs for environmental protection and rehabilitation of lakes were challenged because the specifications were very detailed and appeared to be conducive to an objective evaluation.³⁰⁰ The test is whether the nature of the work desired makes it impossible or impractical to draw specifications satisfactorily to permit competitive evaluation. Mere data collection without a requirement for analysis or opinion was looked upon more as something subject to competitive bidding. 301

Less assurance of coming within the exception for specialized services exists for an individual hired to supervise actual construction operations. Where services under the contract involve overall management responsibilities, they generally are held to be within the exception. For example, in *Gulf Bitulithic Co. v. Nueces County*, the local government employed a contractor to act as its representative to supervise and manage an extensive road construction program. ³⁰² Holding that the contracting agency was not required to award this contract through competitive bids, the court said:

If [the statute] be so construed as to bring...this case within its provisions, the very object of the statute would be defeated, for the obvious reason that, when a county does a given piece of construction work, paying for the materials and labor, the ultimate cost thereof is necessarily largely dependent upon the skill, experience, and business judgment exercised in the management and supervision of such work....It would be ludicrous indeed if a county should publish to the world that it desired to let to the lowest bidder a contract to supervise the building of an elaborate road system...Under such an advertisement, it might be compelled to place the supervision of this immense construction program and disbursement of this vast sum of money under one of its local road overseers....

Each construction management contract must be evaluated on its own merits. Where the amount of managerial discretion and responsibility is sufficient, the contract will be considered one of a technical or professional nature. Where this character cannot be established, the parties must comply with competitive bidding statutes applicable to the contracting agency. Where an arrangement called for a contractor to design a building and perform some of the functions of a construction manager-i.e., coordinating solicitation and acceptance of subcontracts, but not performing any construction or supplying any materials—it was held that competitive bids were not needed.304 However, where the construction manager had duties such as guarantee of a maximum price based on the subcontractor's bids. it was considered to be more like a general contractor, and competitive bidding was required.305

This problem is also illustrated where a public agency contracted with an engineering consultant to advise it on the best way to proceed in arranging for the design, construction, and operation of facilities for management and recycling of solid waste. Award of the

 $^{^{295}}$ Id.

 $^{^{296}}$ 40 U.S.C. § 544 (1999). The ABA Model Code, supra note 59, § 5–205, contains similar requirements. Although price is still a factor in these agreements, the main difference between these statutes and competitive bidding statutes is the point in the process at which price is considered.

²⁹⁷ Photo-Art Commercial Studies, Inc. v. Hunter, 42 Or. App. 207, 600 P.2d 471, 474 (1979).

 $^{^{298}}$ Transportation Displays, Inc. v. City of New Orleans, 346 So. 2d 359, 363 (La. App., 1977).

²⁹⁹ Township of Burlington v. Middle Dep't Inspection Agency, 175 N.J. Super. 624, 421 A.2d 616, 622 (1980); but see SCA Services of Georgia v. Fulton County, 238 Ga. 154, 231 S.E.2d 774 (1977) (contract to provide garbage disposal service) and Trane Co. v. County of Broome, 76 A.D. 2d 1051, 429 N.Y.S.2d 487 (1980) (contract to provide air conditioning repair service by air conditioning unit manufacturer was held to involve use of specialized skill and expertise and so was exempt from competitive bidding).

 $^{^{300}}$ Aqua-Tech, Inc. v. Como Lake Protection and Rehabilitation Dist., 71 Wis. 2d 541, 239 N.W.2d 25 (1976).

 $^{^{301}}$ *Id*.

³⁰² 11 S.W.2d 305 (Tex. Comm'n App. 1928).

³⁰³ *Id.* 11 S.W.2d at 309–10.

³⁰⁴ Mongiovi v. Doerner, 24 Or. App. 639, 546 P.2d 1110 (Or. App. 1976); Attlin Constr. v. Muncie Community Sch., 413 N.E.2d 281 (Ind. App. 1980).

³⁰⁵ City of Inglewood-Los Angeles County Civic Center Auth. v. Argo Constr. Co., 7 Cal. 3d 861, 103 Cal. Rptr. 698, 500 P.2d 601, 604 (1972).

consultant's contract by negotiation rather than competitive bidding was challenged, alleging that the consultant did not come within the "scientific knowledge and professional skill" exception because it did not itself design the plant, but merely acted as a "broker" of the services of others. The court disagreed, and held that as long as the services contracted for involved scientific knowledge and professional skill, it did not matter whether they were provided by an original source or through a broker. The court noted that: "Competitive bidding requires 'full, clear, definite [and] precise' specifications, for there must be a common standard by which to permit the comparison of bids." 307

The precise specifications necessary to competitive bidding of necessity may preclude innovation by bidders. Where the agency wanted bidders to propose the best system for a waste recycling program, this ability to submit innovative proposals was essential. It was thus found to be exempt from competitive bidding requirements.

Installation of computer networks was held to be an exception where the court characterized the contract in question to involve "inextricable integration of a sophisticated computer system and services of such a technical and scientific nature" as to constitute a professional service within the statute.³⁰⁸ However, although the purchase of computer systems and hardware may be considered the purchase of technical equipment and services, courts are more likely to hold that they are equipment purchases that are governed by public bidding requirements.³⁰⁹

iii. Response to Emergencies.³¹⁰—Bidding statutes may provide exceptions for emergency situations in which the temporary necessity for quick action to protect public safety and welfare overrides the interest in promoting competition. Generally, definitions stress imminent danger to life or destruction of property, or a similar expression of unforeseen, unusual, and unacceptable hardships or costs.³¹¹

Courts have required a showing that preventive measures could not have avoided or lessened the risk.³¹²

 308 Autotote Limited v. New Jersey Sports and Exposition Auth., 85 N.J. 363, 427 A.2d 55, 59 (1981).

Accordingly, resort to emergency procedures has been approved when an agency needed to take immediate action to restore interrupted supplies of water, heat, and electricity, 313 or to stop pollution of the public water supply. 314 On the other hand, courts have not fully sanctioned exceptions to competitive bidding where the purpose was to expedite construction of an addition to a courthouse to accommodate a new judge, 315 or repair roads in spring following a normal winter. 316

Economic advantage and convenience for the public agency are not enough to constitute an emergency, even though the contracting officer believes in good faith that these benefits can be more readily obtained for the public through direct negotiation than through advertisement for competitive bidding. Thus, it was invalid for an agency to declare an emergency and invoke the emergency exception to competitive bidding where it found that if the project were bid the prices would likely be unreasonable. The constitution of the public agency and invoke the emergency exception to competitive bidding where it found that if the project were bid the prices would likely be unreasonable.

In the absence of statutory emergency contracting procedures, the exception may be implied from the nature of the contract and other provisions of the public contracting laws. ³¹⁹ In such cases, the special circumstances of the case also are influential. Unexpected necessity requiring prompt action must be shown. ³²⁰ An emergency situation has been described as one that demands immediate attention, and that threatens the public health and safety of a community. ³²¹ In that case, an excavator had been hired to excavate a malfunctioning sewer line. While the line was exposed, falling rock punctured the line. The excavator repaired the line and sought additional compensation. The court held that the district was authorized to allow the additional work

 $^{^{306}}$ Waste Management, Inc. v. Wisconsin Solid Waste Recycling Auth., 84 Wis. 2d 462, 267 N.W.2d 659, 665 (1978).

³⁰⁷ Id. 267 N.W.2d at 665.

³⁰⁹ Pacificorp Capital, Inc. v. State, Through Div. of Admin., Office of State Purchasing, 612 So. 2d 138 (La. App. 1 Cir. 1992).

³¹⁰ Please note that § 1(A)(2)(n), Emergency Contract Award Procedures, of this volume, prepared as part of the 2011 update to this volume, provides a more detailed discussion of contracting procedures and contract awards in emergency situations, including developments since 2005.

 $^{^{311}\,\}mathrm{ABA}$ Model Code, supra note 59, at \S 3-206.

³¹² Grimm v. City of Troy, 60 Misc. 2d 579, 303 N.Y.S.2d 170, 175 (Sup. Ct. 1969) (a resolution of the contracting agency reciting certain facts and declaring that they constitute an emergency is not conclusive, but is sufficient prima facie evi-

dence of an emergency to shift the burden of proof to the party attacking the validity of the award).

 $^{^{313}}$ Merchants Nat'l Bank & Trust Co. v. City of Grand Forks, 130 N.W.2d 212 (N.D. 1964).

 $^{^{314}}$ Northern Improvement Co. v. State, 213 N.W.2d 885, 887 (N.D. 1973) (statute did not include exception for emergencies, court refused to imply one).

 $^{^{315}}$ Reynolds Constr. Co. v. County of Twin Falls, 92 Idaho 61, 437 P.2d 14 (1968).

³¹⁶ Bak v. Jones County, 87 S.D. 468, 210 N.W.2d 65 (1973).

 $^{^{317}}$ Reynolds Constr. Co. v. County of Twin Falls, 92 Idaho 61, 437 P.2d 14, 23 (1968).

³¹⁸ Id. 437 P.2d at 23.

³¹⁹ See General Building Contractors of N.Y. State v. State of N.Y., 89 Misc. 2d 279, 391 N.Y.S.2d 319, 322 (1977); but see Smith v. Graham Co. Comm. College Dist., 123 Ariz. 431, 600 P.2d 44, 47 (1979) (even if an emergency existed, college still needed authority to avoid competitive bidding in an emergency; in fact, leaky roof had existed for some time and college had had time to bid project); Northern Improvement Co. v. State, 213 N.W.2d 885, 887 (N.D. 1973) (statute did not include exception for emergencies; court refused to imply one).

 $^{^{320}}$ See, e.g., Martin Excavating, Inc. v. Tyrollean Terrace Water & Sanitation Dist., 671 P.2d 1329 (Colo. App. 1983).

³²¹ Id. 671 P.2d at 1330.

to be done by that contractor on an emergency basis without advertising for new bids. 322

Where emergency circumstances meet the criteria for an exception to the statutory competitive bidding rules, the extent of the exception and the alternative procedure generally are specified in the statute. To the extent the statute sets forth alternative procedures, such procedures must be complied with fully in order to produce valid contracts. Where the statutory requirements are not complied with, the contractor may not be entitled to payment either under the contract or in quasi-contract. To the other words, the emergency is not a defense to having failed to comply with the applicable statutes.

Emergency procedures generally allow the contracting agency to determine that the emergency exists; there is not a requirement for a formal declaration of emergency.³²⁴ Such a finding may be challenged by a prospective bidder or by a taxpayer, depending upon the state's requirements for bid protests generally.³²⁵

Alternative emergency procedures vary substantially in detail. However, because the need for speedy action is critical in an emergency, a common feature of all such procedures is the temporary suspension of the mandatory requirement for advertisement over a specified period. When freed of this requirement, some agencies have found it most advantageous to procure supplies, services, and construction through direct negotiation with contractors whose capabilities are known from past performance. In some instances, statutory provisions for emergencies specify this course. In others, the requirement of competitive bidding is retained in the emergency situation, but the contracting agency is authorized to compress the process into a shorter time period, 326 or negotiate a contract subject to approval of the contract by the governor.³²⁷

In a few cases, special reporting and accounting requirements are established for expenditures of public funds in emergency situations where regular competitive bidding procedure was not followed. An example is the emergency exemption in the Illinois Procurement Code, which applies in emergencies involving public health, public safety, immediate repairs needed to avoid further loss or damage of state property, disruption to state services, or the integrity of state records. Under this law, an agency must report funds spent in emergencies to the state's Auditor General within 10 days after execution of the contract, with full details of the circumstances. Quarterly reports by the Auditor General

eral to the Governor and Legislative Audit Commission permit both offices to thoroughly review these transactions and evaluate any apparent abuse of the emergency procedures.³²⁹

Statutory provisions for award of contracts to deal with emergencies involving construction or repair of public works wisely avoid restrictive definitions of situations in which the procedures for competitive bidding may be bypassed in favor of speedier action. But as courts have supplied the definition of emergency situations in questionable cases, they generally have insisted that a strong and direct danger to public health or safety be present. Accordingly, in cases where sewer lines were threatened by falling rocks and where sewer lines beneath a river needed repair to seal a break, the circumstances did not justify avoidance of competitive bidding rules.330 Similarly, the need to build a temporary floating bridge to replace a structure damaged by a windstorm did not justify limiting bidders by prequalification to the builder of the floating bridge, despite the fact that use of a major regional highway was interrupted until the temporary bridge was in place.331 Nor did the possible threat to public safety from prison riots justify avoidance of competitive bidding in the award of a contract for construction of prison facilities to relieve overcrowding.332 While the court in that case acknowledged that the state had effectively documented the potential danger to public safety if the overcrowded conditions were not relieved, it explained that to be within the intent of the exemption, "an emergency must involve an accident or unforeseen occurrence requiring immediate action; it is unanticipated or fortuitous; it is a sudden or unexpected occasion for action and involves a pressing necessity."333

Whether an emergency exists for the purpose of entering into emergency contracts without competitive bids is an issue that is fully reviewable by the courts. Otherwise, agencies could claim to have emergencies in an effort to circumvent competitive bidding.³³⁴ In an action challenging the negotiation of a pay phone contract for the state prison system on an emergency basis, the court held that the agency's declaration of emergency is "clothed with a presumption of correctness," and was reviewable only for whether it was arbitrary, capricious, or unreasonable.³³⁵ The court noted that the

 $^{^{322}}$ Id. at 1331.

³²³ Bak v. Jones County, 89 S.D. 468, 210 N.W.2d 65 (S.D. 1973) (contractor not entitled to payment for work on rain-damaged roads did not comply with statutory requirement of filing plans and specifications).

 $^{^{324}\,}See,\,e.g.,\,Wash.$ Rev. Code \S 47.28.170 (2000).

³²⁵ See Grimm, supra note 312.

 $^{^{326}}$ See, e.g., Wash. Rev. Code § 47.28.170 (2002).

³²⁷ FLA. STAT. tit. 26, § 337.11(6)(a) (2000).

 $^{^{328}}$ 30 Ill. Comp. Stat. 500/20-30(c) (1999).

³²⁹ 30 Ill. Comp. Stat. 500/20-30(c) (1999).

Northern Improvement Co. v. State, 213 N.W.2d 885 (N. D. 1973); Martin Excavating, Inc. v. Tyrollean Terrace Water & Sanitation Dist., 671 P.2d 1329 (Colo. App. 1983).

 $^{^{331}}$ Manson Constr. & Eng'r Co. v. State, 24 Wash. App. 185, 600 P.2d 643 (1979).

³³² General Bldg. Contractors of N.Y. State v. State, 89 Misc. 2d 219, 391 N.Y.S.2d 319 (1977) (prison overcrowding was not an adequate basis for declaration of emergency, as it had been known since riot occurred at Attica in 1971).

³³³ Id. 391 N.Y.S.2d at 321.

 $^{^{\}rm 334}$ Union Springs Tel. Co. v. Rowell, 623 So. 2d 732 (Ala. 1993).

 $^{^{335}}$ Id. 623 So. 2d at 734.

"emergency" declared in that case was one of limited duration and was intended only to cover the gap in time between the expiration of one contract and the finalization of a new one, and not to circumvent bidding. 336

iv. Contracts of a Special Nature.—Most states recognize contracts for public utility services and contracts for land acquisition or lease by an agency as being among the situations in which it is impractical to insist on strict compliance with competitive bidding procedures. Exemption of contracts for supply of electricity, heat, water, and other public utilities from competitive bidding rules generally is explained in terms of the monopolistic nature of the utility and the public regulation of its prices. Another situation in which practical considerations have justified an exception to mandatory competitive bidding involves the purchase of real property for public use. Because the specific site and condition of land are among the chief factors that make it desirable or necessary for public use, the purpose of encouraging competition among suppliers is not served by the kind of bidding provided for in the statutes. Reference to the "uniqueness of land" generally suffices to justify an exception for purchases, rentals, and other acquisitions of land or rights in land.337

Another exception occurs where complex construction tasks are part of a larger integrated project in which engineering plans, design, and construction phases must be coordinated within the framework of financing plans. Thus, the contract for construction of an underground parking garage for a retail shopping mall redevelopment project was held to be sufficiently special in its nature due to its financing to warrant award of the contract through negotiation rather than competitive bid.³³⁸

Depending on statutory language, capital improvements such as replacement of heating and air conditioning systems in buildings may not be within the scope of competitive bidding. In a Nebraska case, the statute required bids on "contracts for supplies, materials, equipment and contractual services." The court found no specific requirement in that language that a contract

for capital improvements be competitively bid. 340 However, most definitions of "public works" are likely to be broad enough to encompass capital improvements to public facilities.

When construction contracts required competitive bidding, the court held that the purchase and installation of prefabricated, portable buildings were not subject to that requirement.³⁴¹ Work performed to assemble and attach the prefabricated pieces was incidental to delivery of the materials, all of which were easily relocatable at the option of the owner. Similarly, a court held that a contract for cartographic services to prepare tax maps for use in public works planning and land acquisition did not have to be awarded through competitive bids, because the work did not involve actual physical construction activity on publicly owned land or structures.³⁴² With this rationale, the same statute was construed to exclude contracts for repairing and resurfacing roofs of existing buildings.³⁴³

Where statutes provide that public agencies shall give preference to certain charitable or quasi-public entities in awarding contracts for public work, the limits of such exceptions generally must be defined by the courts. Thus, a decision to call for competitive bids to make identification photographs for drivers licenses was successfully challenged as contrary to a statute requiring state offices to obtain needed services from charitable nonprofit agencies for handicapped persons whenever they were competent to provide the service at fair market value.344 In another case involving the same nonprofit agency, the court held that it was proper to award a contract to the agency for the operation of rest areas prior to the statutorily required determination of fair market price.345 The court reasoned that delay in award of the contract would have required closure of the rest areas, and the contract contained a termination for convenience clause that could be invoked if the determination of fair market price were reversed.

Where a preference or an exception to the competitive bidding statute is not specific, but is based on an implicit exception favoring organizations with programs that perform valuable services in the public interest, its limits are interpreted restrictively. In the case of a contract awarded for painting subway stations, the court

 $^{^{336}}$ Id.

³³⁷ Massey v. City of Franklin, 384 S.W.2d 505, 506 (Ky. App. 1964) (building purchase not subject to bidding requirements). However, statutes that allow an agency to lease land that it owns may require that the land be leased to the highest bidder. See, e.g., Sellitto v. Borough of Spring Lake Heights, 284 N.J. Super. 277, 664 A.2d 1284 (1995) cert. denied, 143 N.J. 324, 670 A.2d 1065 (1995) (statute allowing county or municipality to lease land or buildings to person who will pay highest rent does not require competitive bidding; however, another controlling statute did require competitive bidding; remanded with order to lower court to enjoin lease with cell phone company).

 $^{^{338}}$ Graydon v. Pasadena Redevelopment Agency, 104 Cal. App. 3d 631, 164 Cal. Rptr. 56, 64 (1980).

 $^{^{339}}$ Anderson v. Peterson, 221 Neb. 149, 375 N.W.2d 901, 906 (1985).

³⁴⁰ *Id.* 375 N.W.2d at 906 ("Nebraska statutes covering county expenditures and competitive bidding comprise a crazy quilt of legislation."); N.R.S. § 23-324.03.

 $^{^{341}}$ Steelgard, Inc. v. Jannsen, 171 Cal. App. 3d 79, 217 Cal. Rptr. 152, 161 (1985).

 $^{^{342}}$ Andover Consultants v. City of Lawrence, 10 Mass. App. Ct. 156, 406 N.E.2d 711, 714 (1980).

³⁴³ Commonwealth v. Brown, 391 Mass. 157, 460 N.E.2d 606, 609 (1984) (definition of "construction" did not include reconstruction, alteration, repair, or remodeling).

 $^{^{344}}$ Pa. Indus. for Blind and Handicapped v. Larson, 496 Pa. 1, 436 A.2d 122, 124 (1981).

³⁴⁵ Pa. Indus. for Blind and Handicapped v. Department of General Services, 541 A.2d 1164, 1166, 116 Pa. Commw. 264 (1988).

rejected arguments that a law authorizing rehabilitation and development of job skills of persons with poor employment records due to alcoholism, drug addiction, imprisonment, or other socioeconomic disability had the effect of excluding contracts for this program from the competitive bidding rule. While this argument should not be taken lightly, the court said, "the countervailing policies embodied in…the Public Authorities Law run too deeply to permit the contract at bar to wade through them by implication."³⁴⁶

v. Extensions of Existing Contracts.—The necessity for competitive bidding may also be raised where an awarding authority executes an extension or renewal of a previous contract for those services rather than advertising for bids. In holding that such an extension was invalid because it was awarded by negotiation rather than bidding, the court distinguished between a right to renew an existing contract and an authorization for the parties to enter into negotiations at the contract's expiration if the parties desire to do so.347 The right to renew an existing contract under identical terms is not the same as a provision that allows negotiations. The latter is inoperable where the contract is subject to competitive bidding.348 The court noted two Washington cases that made this distinction. Miller v. State involved a contract for purchase of light bulbs. 349 At the expiration of the contract, the agency negotiated for the renewal of the contract with the vendor. The court held this new contract was void because the agency had not complied with competitive bidding requirements.350 However, in Savage v. State, the contract contained a provision allowing for extension of the contract, at the State's option, for 1-year periods up to 3 years, on the same terms.³⁵¹ The court found this provision to be valid, as it was clearly an option-to-renew clause as opposed to a negotiation provision. The provision extended the existing contract, and did not create a new one.352

An agency may also run the risk of being accused of circumventing competitive bidding when it amends an existing contract, rather than advertising for a new contract at the end of the contract term. Generally, a competitively bid contract cannot be materially amended.³⁵³ One method of analyzing whether amendment is justified, rather than advertising for a new contract, is to question whether there is justification for a sole source for that particular contract. If there is, then

it makes sense for the agency to simply extend the existing contract and document its reasons for doing so. However, if the contract would not meet the criteria for a sole source, the agency should advertise for bids.

vi. Methods of Noncompetitive Award of Contracts-Where an exception to the requirement for competitive bidding already exists, a contracting agency has a choice of several methods of awarding a contract. These include 1) procedures for soliciting bids from a limited number of selected potential bidders who are prequalified, sometimes wherein negotiations with one or more bidders may result in modifications of specifications, work methods, performance criteria, or price; and 2) negotiations with a sole source. The contracting agency is allowed substantial discretion in selecting the method that best serves the public interest. However, its judgment must always be consistent with the policies requiring that negotiated awards must be made with the maximum competition that is practicable, and that the use of a noncompetitive award should be limited to the minimum needs of the contracting agency. Also, a sufficient justification for the exception must always exist before a noncompetitive award is permitted, and should be documented.

vii. Sole Source Contracts.-When a contracting agency undertakes negotiations with a sole source, the agency must be able to show that the sole source possesses a unique capability to furnish the property, services, or performance required to meet the agency's minimum needs.³⁵⁴ The determination that a particular source is in fact the sole source available for specified products or services may not be based on the unsupported opinion of the agency's contracting officer. It must be based on showing that the appropriate effort was made to investigate potential sources without success in finding any others. Generally, three requirements must be met: 1) the goods or service offered must be unique; 2) the uniqueness must be substantially related to the intended purpose, use, and performance of the goods or services sought; and 3) the entity seeking to be declared a sole source must show that other similar goods or services cannot perform desired objectives of the agency seeking those goods or services.355 Uniqueness alone does not suffice, as any products may be shown to be "unique."356

A distinction must be made between a sole source contract and one in which the specifications are so narrowly drawn that only one bidder will be able to meet them. While the former, if supported by the above criteria, is a legitimate method of avoiding competitive bidding, the latter is not.³⁵⁷ This is discussed more fully in Section 1.B. regarding "or equal" clauses.

³⁴⁶ District Council No. 9, Int'l Bhd. of Painters & Allied Trades v. Metropolitan Transp. Auth., 115 Misc. 2d 810, 454 N.Y.S.2d 663, 669 (1982).

 $^{^{347}}$ Browning-Ferris Indus. of Tenn. v. City of Oak Ridge, 644 S.W.2d 400, 402 (Tenn. App., 1982); see also Edwards v. City of Boston, 408 Mass. 643, 562 N.E.2d 834 (1990).

³⁴⁸ Browning-Ferris, 644 S.W.2d at 402.

³⁴⁹73 Wash. 2d 790, 440 P.2d 840 (1968).

³⁵⁰ *Id*. at 843.

 $^{^{351}\ 75\} Wash.\ 2d\ 618,\ 453\ P.2d\ 613\ (1969).$

 $^{^{352}}$ *Id*. at 616.

³⁵³ Baxley v. State, 958 P.2d 422 (Alaska 1998).

³⁵⁴ See ABA Model Code, supra note 59, at § 3-205.

³⁵⁵ General Electric Co. v. City of Mobile, 585 So. 2d 1311, 1315–16 (Ala. 1991).

³⁵⁶ *Id*. at 1315.

 $^{^{357}}$ Unisys Corp. v. Department of Labor, 220 Conn. 689, 600 A.2d 1019, 1023 (1991) (question is whether specifications are

n. Emergency Contract Award Procedures

Most state DOTs have been forced, at one time or another, to perform repairs to Interstate and state highways and bridges on a sudden, unanticipated, emergency basis, as a result of natural disasters such as earthquakes, landslides, rockfalls, floods, ice storms, tornadoes, and hurricanes. They have also been compelled to provide in-kind emergency assistance to municipalities for repair of off-system municipal transportation facilities as the result of such natural disasters. At least one state DOT, NYSDOT, has further been confronted with emergency repair activities as the result of a terrorist attack.

Emergency situations require prompt responses. These can be difficult to carry out in a timely way under FHWA's standard federal-aid program requirements and traditional state highway letting statutes, which require preparation and publication of detailed plans, advertising for competitive bids, detailed review of bids, and the like. State DOTs faced with emergency situations must thus determine how to accomplish the rapid performance of emergency repair work despite the existence of such statutory requirements. Where the President issues a federal disaster emergency declaration and Federal Emergency Management Agency (FEMA) financial aid becomes available, state DOTs must also make sure that the procurement procedures they follow do not render them ineligible to receive reimbursement from FEMA for the emergency work they perform. Further, both federal agencies and state-level external control and audit agencies are also aware of and sensitive to the risk of abuse of emergency procedures to bypass normal procurement requirements in situations that do not truly qualify as emergencies.

Federal statutes, FHWA, FEMA, the Federal Office of Management and Budget (OMB), and the National Cooperative Highway Research Program (NCHRP) have issued guidance for state DOTs on contracting in emergency situations. See Certain other state statutes must be taken into account as well, particularly with regard to external control agencies and the performance of off-system work on municipal transportation facilities.

drawn to the advantage of one manufacturer, not for reasons in public interest but to assure award to that manufacturer).

1. Federal Requirements

Where emergency repairs are to be performed on Interstate or state highways or bridges, which may be eligible for FHWA-administered federal aid, state DOTs must be cognizant of applicable FHWA and FEMA requirements. There are at least three sets of applicable FHWA and FEMA requirements:

The emergency situation must be one falling within the requirements of FHWA regulations. 360 FEMA also requires that the President must have declared a federal disaster emergency pursuant to the Federal Stafford Act. 361

FHWA requires, that emergency repairs must be undertaken during or immediately following the occurrence of the disaster in order to minimize the extent of the damage, protect remaining facilities, or restore essential traffic.³⁶²

FHWA requires that emergency repair work may be accomplished by contract, or by negotiated contractor or public agency force account methods, and that all projects for permanent repairs or reconstruction must be procured in accordance with FHWA regulations. FEMA also has a variety of related requirements, too numerous and detailed to summarize here, but deserving of careful attention in an actual emergency response in order to avoid loss of eligibility for federal reimbursement. Fig. 364

2. State Statutes and Regulations

In a survey conducted during 2007, NCHRP found that at least 31 states had adopted statutes or regulations providing for contracting in emergency situations.³⁶⁵ At least some major states have not enacted such authorization, however. It is thus advisable for state DOT in-house counsel to research, preferably under non-emergency conditions prior to the occurrence of any emergency, whether their state has enacted emergency contracting legislation or regulations, and what other state statutes may come into play in the event of a disaster emergency.

³⁵⁸ See, e.g., 23 U.S.C. §§ 112(b)(1) and 23 U.S.C. 125; FHWA regulations, 23 C.F.R. §§ 635.104, 635.120, 635.204, 635.309, 668.103, and 668.105(i); Dwight A. Horne, Director of FHWA Office of Program Administration, Memorandum, Information: Procurement of Federal-Aid Construction Projects, June 26, 2008; available at http://www.fhwa.dot.gov/construction/080625.cfm, last accessed on Sept. 7, 2013; FEMA regulations, 44 C.F.R. Part 13; OMB Circular A-102; and JULIA L. PERRY, ESQ. & MARGARET L. HINES, ESQ., EMERGENCY CONTRACTING: FLEXIBILITIES IN CONTRACTING PROCEDURES DURING AN EMERGENCY (NCHRP Legal Research Digest 49, 2007).

 $^{^{359}}$ See, e.g., New York State Finance Law \S 112; and New York State Executive Law \S 28, 29, and 29-a.

³⁶⁰ 23 C.F.R. § 635.204; see also Horne, supra note 358.

³⁶¹ PERRY & HINES, supra note 358, at 12.

³⁶² 23 C.F.R. § 668.103; see also Horne, supra note 358.

 $^{^{363}}$ 23 C.F.R. § 668.105(i), citing 23 C.F.R. pts. 635 and/or 636 in connection with permanent repairs or reconstruction; see also Horne, supra note 358.

³⁶⁴ For a brief introductory summary, see PERRY & HINES, supra note 358, at 12–13. In the experience of the authors of the update to this current volume, FEMA requirements are in practice sufficiently complex that it may be advisable for state DOTs to keep on staff at least one employee having accumulated expertise regarding FEMA requirements and procedures in order to maximize recovery of federal reimbursement for emergency repairs and minimize avoidable losses of eligibility for reimbursement.

 $^{^{365}}$ *Id.* at 4 n.3.

In general, state statutes authorizing emergency contracting typically require the written recording of a determination that an emergency exists; limit emergency contracting to supplies, services, and construction activities necessary to meet the emergency in question; and authorize limitations upon the competitive bidding process in order to enable rapid response to emergency conditions. The need to spend "use it or lose it" funds in order to avoid the lapse of funds at the end of a fiscal year is generally not considered to justify the invocation of statutory authorization for emergency contracting. 366

a. Who may issue an emergency contract?

The statutes of each individual state must be checked to determine which public officials are authorized to issue emergency contracts. At least 12 states authorize the Commissioner or other chief executive officer of the state DOT to issue emergency contracts; and at least five states authorize the state director of purchasing or procurement to do so.³⁶⁷

b. When may emergency contracting procedures be used?

While the statutes of each individual state must be checked, NCHRP's 2007 survey determined that such statutes typically authorize emergency contracting and the waiver of normal contracting requirements when emergency conditions threaten public health, safety or welfare, government property or operations, or the provision of necessary or mandated government services, and when there is no time to comply with the procedures usually required for contracting. Several states also require that emergency contracting be reserved for situations in which following standard procedures will not meet public need, and that once the emergency has been met, permanent repairs or reconstruction must be undertaken following standard, nonemergency state procurement procedures.³⁶⁸

c. The "where and when" alternative to express emergency authority

Several states, including some that do not have state statutes expressly authorizing emergency contracting, have developed an alternative approach using standard state highway contract letting statutes. Under this approach, the state DOT uses standard letting procedures to award annual contracts to perform emergency repairs on a standby, "where and when," or "if and where directed" basis. Since the exact cost of specific repairs to specific facilities cannot be determined in advance, such contracts typically require bidders to bid on unit or lump-sum prices of certain specified types of repairs, with the bidder having the lowest aggregate total of

such prices winning the contract. In order to cap the state's potential financial exposure to stay within the limits of existing funding appropriations, the amounts of such contracts are limited to a specified maximum "not to exceed" amount. In the event of a major disaster emergency, such amounts may be increased through orders on contract (change orders) approved by external control agencies (where required), if the state provides additional emergency funding appropriations.³⁶⁹

d. Contracting with municipalities for off-system emergency repairs

Providing state assistance to municipalities in the form of a state DOT performing "off system" emergency repairs to municipal highways or bridges, instead of or in addition to Interstate or state highways, can pose a variety of legal and financial problems for state DOTs. State statutes granting statutory authority to state DOTs for construction and reconstruction of highways and bridges typically limit such authority to Interstate and state highways, and leave the construction of municipal roads up to the municipalities. In at least some states, such limitations may be waived, and the state DOT may legitimately undertake "off system" emergency repairs to municipal facilities, when the Governor formally declares the existence of a state disaster emergency and orders state agencies to assist municipalities.370

Things are not always so straightforward, however. As a practical matter, the declaration of a state disaster emergency may transfer the cost of responding to an emergency from municipal officials, governments, and taxpayers to state officials, governments, and taxpayers. During periods of tight state budgets and stringent fiscal constraints, state Governors may be reluctant to issue a formal state declaration of a disaster emergency, knowing that this will have an adverse effect on the state budget and use up scarce funds needed for other purposes. Either Governors or state legislators may then seek to prevail upon state DOTs to provide such emergency assistance anyway, even in the absence of a formal disaster declaration—which is beyond the statutory authority of many state DOTs, and could also leave state DOT personnel without the benefit of state legal defense or indemnification in the event of an accident occurring during such operations.

In some states, there are statutory provisions authorizing state DOTs to provide emergency assistance to municipalities, at least under some specified situations, if the municipalities commit to reimburse the

 $^{^{366}}$ *Id.* at 5–6.

³⁶⁷ *Id.* at 7.

³⁶⁸ *Id.* at 7–8.

 $^{^{369}}$ New Jersey DOT uses this approach; see PERRY & HINES, supra note 358, at 8. To the knowledge of the authors of the update of this current volume, NYSDOT has also been using this approach for a number of years.

³⁷⁰ See, e.g., New York State Executive Law §§ 28, 29, and 29-a. For an example of a Governor's declaration of a state disaster emergency under those statutes, see, e.g., Governor Cuomo's Executive Orders No. 17 of August 25, 2011, and No. 19 of September 1, 2011.

state DOT for the cost of doing so.371 Where the state DOT is under political pressure to provide emergency assistance to a municipality, but the Governor refuses to declare a formal state disaster emergency, the solution in such states may be for the state DOT to enter into a contract with the municipality to provide emergency response services, with a municipal commitment of future reimbursement. Such a contract need not be lengthy, and may be in the form of a letter agreement, with a municipal official countersigning and faxing back a letter agreement prepared by the state DOT, so long as such arrangements are cleared with external control agencies if appropriate. For municipalities facing stringent fiscal constraints, at least part of the reimbursement commitment may be in the form of inkind services rather than cash payment. Such arrangements, while involving at least some degree of risk, appear preferable to leaving members of the public at risk due to lack of response to genuine emergency conditions, and also preferable to undertaking "off system" work without the benefit of any written arrangement to cover it.

3. Range of Contracting Options

State DOTs always have the option of performing repair work under standard state highway letting statutes, with advance publication of plans, published advertising for competitive bids, and the like. This may well be done for long-term, permanent repairs or reconstruction in the wake of a major disaster. The problem, of course, is that standard letting procedures are too time-consuming for state DOTs to be able to use them in providing timely, short-term relief during and immediately after the occurrence of a disaster emergency.

Where federal-aid funds are involved, state DOTs may be constrained not only by FHWA regulations, but also by federal statutes, the Federal Acquisition Regulations (FARs), and Federal OMB administrative guidance concerning contracting practices. Under the Federal Brooks Act, for example, contracting officers are required to obtain as much open competition as the circumstances will allow, although simplified acquisition procedures may be acceptable for engineering services, contracts below a certain dollar value, and task orders placed under Indefinite Delivery/Indefinite Quantity contracts. The FARs also recognize that there may be circumstances where contracting officers need some discretion, noting that "contracting officers should be allowed wide latitude to exercise business judgment." 373

Depending upon the specific circumstances, contracting options may range from using accelerated award procedures to let publicly advertised contracts incorporating detailed requirements for contractors to document actual costs; to using faxed or telephoned requests for proposals to a limited number of selected firms, with a contract which is not fully detailed but provides at least some level of written contract requirements, and compensation rates drawn from other existing contracts or standard pricing in the industry; to limited competition or sole source contracts based on telephone or fax proposals.³⁷⁴

It should be noted that the MAP-21 legislation enacted in 2012 directs the U.S Secretary of Transportation to designate as a categorical exclusion under NEPA "the repair or reconstruction of a road, highway or bridge damaged by a declared emergency or disaster...if the repair or reconstruction is in the same location and with the same specifications as the original project and is commenced within two years of the declaration of emergency or disaster."³⁷⁵

4. Record-Keeping Requirements

While it must be recognized that emergency repairs by state DOT forces or contractors during disaster emergencies are often carried out under highly challenging field conditions, state DOT officials would be well advised to keep written records that are as detailed as possible under the circumstances. The more that state DOT officials depart from standard procedures in arranging such work, the more documentation they may later be asked to produce in order to justify their actions. Especially in circumstances where emergency response measures are arranged by telephone and fax under time pressure while a disaster emergency is still occurring, it is important for contracting officers to keep written or computer notes of which contractors they are dealing with, what specific conditions and locations they are asking each contractor to address, what work they are authorizing, and what agreements are reached regarding payment terms. The lack of such records can prove highly disruptive in the aftermath of a disaster emergency, and can cause state DOTs significant problems in the face of later inquiries.376

5. What Can Go Wrong?

Since emergency contracting is generally undertaken during the occurrence or the immediate aftermath of a disaster emergency, which are circumstances creating a large number of unanticipated and somewhat unpredictable stresses and pressures, Murphy's Law defi-

 $^{^{371}}$ See, e.g., New York State Highway Law \S 55, authorizing NYSDOT to provide emergency snow and ice control operations for municipalities that agree to pay reimbursement for the costs of doing so.

 $^{^{372}}$ 40 U.S.C. §§ 541 et seq., cited in PERRY & HINES, supra note 358, at 6 n.16.

 $^{^{373}}$ FAR $\$ 1.602-2, cited and quoted in PERRY & HINES, supra note 358, at 4 n.1.

³⁷⁴ PERRY & HINES, supra note 358, at 8-9.

³⁷⁵ See Joint Explanatory Statement of the Committee of the Conference, June 29, 2012, at 2, http://docs.house.gov/billsthisweek/20120625/HR4348crJES. pdf, last accessed on Sept. 7, 2013.

 $^{^{376}}$ *Id*. at 9.

nitely applies: if it can go wrong, it will. State DOT personnel directly engaged in field performance of emergency work during a major disaster emergency may be at considerable personal risk of death or injury. More prosaically, problems typically encountered during emergency contracting, as noted by an NCHRP study, include: the absence of any written record of which work what contractors were orally ordered to perform; accidentally award of the same work to more than one contractor; failure to provide timely notice that the contractor will be required to document costs; issuance of vague or inaccurate work orders that fail to accomplish necessary work but result in performance of unnecessary work at incorrect locations; issuance of work orders by persons lacking authority to do so; awarding a sole-source contract when at least some limited competition would have been possible; and submission by contractors of inflated charges without adequate supporting documentation.377 As is often said, hindsight is always 20-20. In the event of expensive contracting problems occurring in connection with a major disaster emergency, hindsight may be exercised by FHWA, FEMA, federal or state auditors, federal or state legislative committees, or the news media, who may be predisposed to focus more on what went wrong than on what went right.

6. New York City Experience with 9/11 Emergency Contracts

While most emergency situations affecting transportation facilities arise from natural disasters, at least one such situation has arisen from a terrorist attack. The September 11, 2001 (9/11), attack by Al Qaeda upon the World Trade Center in New York City killed more than 2,600 people—including three members of the staff of the New York Metropolitan Transportation Council (NYMTC), the MPO for the New York Metropolitan Area, whose offices were on the 83rd floor of the Trade Center's North Tower. The attack not only destroyed the buildings of the World Trade Center complex and buried a large area in debris, but also caused extensive damage to adjacent and nearby streets and a significant arterial highway, Route 9A.

The New York Fire Department lost 343 firefighters and 15 emergency medical technicians, the Port Authority of New York and New Jersey Police Department lost 37 police officers, and the New York Police Department lost 23 police officers who responded to that attack. Responding fully to that emergency made demands on far more than just emergency response agencies. In addition to those agencies, other New York City agencies, NYSDOT, and the New York National Guard sent personnel to the World Trade Center site following the attack to search for survivors amid the debris and clear wreckage. Some of those personnel would later develop chronic respiratory difficulties as a result.

New York's Governor issued an Executive Order declaring the event to be a state disaster emergency, and directing state agencies to take all necessary steps to respond to it. The damage was so extensive, the conditions at the site were so unpredictable, and the need for rapid response was so great, that extensive contracting was required to augment the efforts of government agencies. Both the exceptional circumstances and time pressures made it virtually impossible to use traditional design-bid-build contracting methods for such purposes.

Instead, the Port Authority of New York and New Jersey, the owner of the World Trade Center site, used a Request for Proposals (RFP) process to select demolition contractors to remove the debris, clean up the site, and perform temporary emergency repairs to forestall risks such as possible water damage to New York City's subway system. In order to protect against the risk of criminal fraud affecting the cleanup efforts, the Port Authority included in its cleanup contracts requirements for the contractors to employ Independent Private Sector Inspector Generals, or IPSIGs, to monitor the work on an ongoing basis in order to deter, detect, and prevent waste, fraud, and abuse from inflating the cost of the work.

NYSDOT also used orders on contract (change orders) and supplemental agreements to existing highway projects in order to repair the damage to Route 9A, the arterial highway adjacent to the World Trade Center site.

7. New York State Experience with Hurricane Irene, 2011

Following the occurrence of extensive damage to state and municipal highways and bridges caused by disastrous flooding due to Hurricane Irene in August 2011, New York State's Governor issued two Executive Orders, No. 17 of August 25, 2011, and No. 19 of September 1, 2011, invoking the emergency provisions of New York State Executive Law §§ 28, 29, and 29-a. In Executive Order No. 19, the Governor temporarily suspended the applicability of Highway Law § 38(1), (2) and (3) (the State's competitive bidding requirement for highway contracts) and Article 4-C of the Economic Development Law, "in the event that the Commissioner of Transportation determines it necessary to authorize the award of emergency contracts and/or to combine design and construction services in contracts and to use such services when needed." The Governor also temporarily suspended Section 112 of the State Finance Law (requiring approval of all state contract awards or amendments by the State Comptroller) "to the extent consistent with Article V, Section 1 of the State Constitution, and to the extent that the Commissioner of Transportation determines it necessary to add additional work, sites and time to State contracts or award emergency contracts." The Governor further suspended Section 136-a of the State Finance Law (requiring selection of architectural and engineering firms through competitive RFP on a best-qualified rather than lowest-

 $^{^{377}}$ *Id.* at 9.

cost basis) "to the extent that the Commissioner of Transportation determines it necessary to combine design and construction services in one contract and/or to obtain design and construction inspection services." Beyond that, the Governor suspended Section 163 of the State Finance Law (requiring procurement of commodities and materials through competitive bidding conducted by the State Office of General Services) "to the extent of allowing the Commissioner of Transportation to purchase necessary commodities and materials without following the standard procurement process." Finally, the Governor suspended Article 8 of the State's Environmental Conservation Law, 6 New York Codes, Rules and Regulations (NYCRR) Part 617 (environmental regulations) and 17 NYCRR Part 15 "to the extent that the Commissioner of Transportation determines the work is immediately necessary for the replacement, rehabilitation, or reconstruction of structures and facilities in response to the emergency and is performed to cause the least change or disturbance in the environment as is reasonably practicable under the circumstances."

These Executive Orders considerably enhanced NYSDOT's ability to respond rapidly and flexibly in order to repair the state and municipal highways and bridges damaged or destroyed by the flooding caused by the hurricane.

o. Maintenance Contracting: Work Order, Job-Order, On-Call, Where and When, and Evergreen Contracting

Traditionally, state DOT contracting programs have focused on the capital construction or reconstruction of highways and bridges. Operations, maintenance, and repairs of limited scope have generally not been eligible for federal-aid reimbursement, and have traditionally been performed by state DOT employees. With many states facing fiscal pressures and demands to reduce state payrolls, however, some state DOTs have considered ways to contract out at least some portion of their maintenance programs.

The Federal MAP-21 legislation enacted in 2012 may make some changes in this area. The Conference Committee report on the legislation indicates that it creates a new NHPP to improve maintenance on both the Interstate system and an extended NHS. $^{\rm 378}$

One approach involves job-order contracting (JOC). Although originally developed for the provision of building maintenance services, in recent years this method of contracting has begun to be adapted to highway maintenance contracting as well. A job-order contract has been described as a "long-term, indefinite-delivery, indefinite-quantity contract for construction services delivered on an on-call basis through firm, fixed-price delivery orders that are based on pre-established unit

prices."³⁷⁹ Among the claimed benefits of JOC are that, by using a single consolidated procurement process and contract for delivering multiple items of work through a work-order process over a specified period, rather than bidding out each item of work as a separate contract, this approach delivers the performance of work more rapidly, and also reduces the agency's overhead costs for contract letting, award, and administration.³⁸⁰

At least one state, Arizona, has enacted statutory authorization for this method of maintenance contracting.³⁸¹ The statute provides for the agency to use an RFP procurement process. For job-order-contracting construction services, the statute requires the RFP to include:

- (a) The department's project schedule and project final design and construction budget or life cycle budget for a procurement that includes maintenance services or operations services
- (b) A statement that the contract will be awarded to the offeror whose proposal receives the highest number of points under a scoring method.
- (c) A description of the scoring method, including a list of the factors in the scoring method and the number of points allocated to each factor.
- (d) A requirement that each offeror separately submit a technical proposal and a price proposal and that the offeror's entire proposal be responsive to the requirements in the request for proposals.
- (e) A statement that in applying the scoring method the selection team will separately evaluate the technical proposal and the price proposal and will evaluate and score the technical proposal before opening the price proposal.
- (f) If the department conducts discussions pursuant to paragraph 5 of this subsection, a statement that discussions will be held and a requirement that each offeror submit a preliminary technical proposal before the discussions are held.³⁸²

In crafting an RFP for job-order-contracting maintenance services, an agency might, as an example, specify multiple standard items of maintenance construction work, such as repair or reconstruction of culverts of

³⁷⁸ See Joint Explanatory Statement of the Committee of the Conference, June 29, 2012, at 2,

http://docs.house.gov/billsthisweek/20120625/HR4348crJES.pdf, last accessed on Sept. 7, 2013.

³⁷⁹ Lisa Cooley & Mary Gauer, You Want How Much For That Change Order?, BUILDINGS, July 1, 2010, available at http://www.buildings.com/ArticleDetails/tabid/3334/Default.asp x?ArticleID=10181, last accessed on Sept. 8, 2013; see also JOC—Taking the Struggle out of Construction, an online publication of the Center for Job Order Contracting Excellence, available at http://www.jocexcellence.org, last accessed on Sept. 8, 2013.

³⁸⁰ Key Benefits to JOC, an online publication of the Center for Job Order Contracting Excellence, available at http://www.jocexcellence.org/joc_benefits.htm, last accessed on Sept. 8, 2013.

³⁸¹ ARIZ. REV. STAT. § 28-7366, Construction-manager-atrisk construction services and job-order-contracting construction services; available at http://www.azleg.gov/Format Document.asp?inDoc=/ars/28/07366.htm&Title= 28&DocType=ARS, last accessed on Sept. 8, 2013.

³⁸² Ariz. Rev. Stat. § 28-7366(F)(3).

specified lengths to state DOT standards, or pavement defect repairs of a specified type for a specified length of highway, within a specified region of a state, and solicit unit-price bids for each of the items of work, with the contract to have a specified duration and specified minimum and maximum prices. Firms could submit technical proposals for what equipment and methods they would use to perform the work, and unit-price bids for each standard item of work set forth in the RFP. The agency would use the scoring method set forth in the RFP to score the technical proposals first, before opening and scoring the price proposals, and then completing the scoring of the entire proposals.

"Where and When" contracting is a somewhat comparable approach, using traditional highway construction lowest responsible bidder letting statutes to award contracts for on-call emergency repairs to highways or bridges within a specified region of a state and a specified time period, subject to a specified maximum amount. These are typically bid on a cost plus profit basis, with the low bidder being the firm that bids the lowest profit margin percentage to be applied to costs in determining compensation for work performed under the contract.

"Evergreen" contracting is an approach to maintenance contracting that provides for maintenance construction services to be performed for a time period of specified length, but also provides for optional renewal of the contract upon the completion of the initial time period for the same length of time, unless and until the contract is cancelled by either party. The U.S. General Services Administration (GSA), for example, has established Evergreen options for federal agencies to award multiyear, renewable contracts with commercial suppliers under the GSA Schedules Program.³⁸³

Maintenance contracting does have potential drawbacks as well as benefits, however. In return for the perceived benefits, the government agency gives up direct control over maintenance personnel, equipment, and supplies, depending upon a contractor to provide a timely response of acceptable quality. This may be adequate for routine tasks performed on a non-emergency basis, but leaves the agency without direct control over the delivery of services in emergency conditions, even though the agency is accountable to elected officials and the public for prompt delivery of emergency response measures under such circumstances. In addition, while this may lead to adequate results if the contractor proves to be competent, well managed, and effective, it may also leave the agency temporarily without at least some of its maintenance resources if the contractor proves to be incompetent, poorly managed, or ineffective and has to be terminated for cause and replaced through a new round of procurement.

p. Alternate Bids

When engineering problems can be solved by alternative means, the contracting agency may face a dilemma in preparing its plans and specifications. The goal of competitive bidding is to achieve economy in construction costs, and engineering judgment may honestly differ on the best way to achieve this goal. Rather than designate one particular method of construction or one list of materials that must be used, contracting agencies may ask for proposals on alternative approaches, specifying only the end result, and leaving it to the bidders to select materials, methods, and other aspects of their bids. In some cases, this approach has official status in directives to the contracting officer to solicit proposals on all feasible methods as a basis for awarding a contract. In others, the highway agency's governing legislation may not mandate the solicitation of alternative bids, but may accord the contracting officer the authority to proceed in this way where circumstances make it desirable.384 Bidding on alternatives may take the form of instructions to prepare bids on alternative methods or specifications for accomplishing the contracting agency's objective. In such cases the bids are evaluated for returning the greatest value for the money spent. Success in using this type of bidding requires clear and complete specifications and instructions, and proposals that are carefully prepared and responsive.385

An illustration of the issues raised by another type of alternate bidding is provided by L.G. DeFelice and Son, Inc. v. Argraves, involving contracts for construction of the Connecticut Turnpike.³⁸⁶ In the notice to prospective bidders, the highway commissioner requested alternate bids, one for construction of reinforced concrete and one for bituminous concrete pavement. The notice stated that the agency would determine the type of pavement to be used after it received bids, and after it had fully investigated all factors, including costs. Plaintiff was the low bidder on bituminous concrete, and in this bid was lower than the lowest bidder on reinforced concrete paving. Accordingly, when the highway commissioner awarded the contract to the low bidder for the reinforced concrete paving, plaintiff sought to enjoin the award as being contrary to the legal requirement for award to the lowest responsible bidder. The court denied the injunction, stating:

[T]he great weight of authority supports the proposition that the awarding official may exercise his discretion to determine after the receipt of alternative bids which alternative to select and to select the lowest responsible bidder under that alternative...The court will not interfere with the exercise of discretionary powers vested in a public official in the absence of fraud, corruption, im-

 $^{^{383}\,}See$ http://www.gsa.gov/portal/content/198473, last accessed on Sept. 8, 2013.

³⁸⁴ Ericsson GE Mobile Communications v. Motorola Communications & Electronics, 657 So. 2d 857 (Ala. 1995).

 $^{^{385}}$ V. C. Vitanza Sons v. Murray, 90 Misc. 2d 893, 396 N.Y.S.2d 305 (1977).

³⁸⁶ 19 Conn. Supp. 491, 118 A.2d 626 (Super. Ct. 1955).

proper motives or influences, plain disregard of duty, gross abuse of power or violation of the law.387

The Connecticut court stressed the significance of statutory language granting the contracting agency discretion in calling for bids and selecting the lowest responsible bidder.

Projects that allow bidding in the alternative may raise questions regarding practices that are prohibited. They adversely affect the quality of competition in the bidding process, even though there is no corruption or conspiracy in the bids, and no actual loss or unnecessary extravagance suffered by the public agency. Where such practices are found, contracts involving them are considered unlawful or may be set aside. For example, a contract that allowed alternative proposals for all major bid terms was found to have allowed bidders to "rewrite the bid advertisement" and thus prevent fair competition by preventing an exact comparison of the bids. The court found that under the circumstances, there was no fair and reasonable method to determine the highest bidder for a lease.

Other instances in which these results were considered to be present were where one submitted a high bid on one alternative and an excessively low bid on the other, with the intention of underbidding others on the total project and so securing contracts for all of the work. Bidders who use this practice to advance an "all or none" strategy may reduce the risk of having only their excessively low bid accepted by claiming it was made by mistake and must be rejected. However, the prospect that a "high-low" bidder may be able to manipulate the award and gain an advantage over other bidders might leave the bid vulnerable to challenge.

Circumstances may alter results, however, and were held to do so in *Sempre Construction Co. v. Township of Mount Laurel.*³⁹⁰ An agency asked for bids on excavation work, reserving the right to award the contract on "base bids" or "base plus alternates." One construction company, making no secret that it wanted all of the work or none of it, submitted a high base bid and an extremely low bid for the alternates. The contractor's action was upheld by the court when challenged by a competing bidder, because the high-low bids were free from any technical defects by which the bidder might be relieved from its duty to accept an undesired contract.

Where contract specifications call for bidding on alternative materials or methods of work, such specifications sometimes have been challenged as being inadequate for competitive bidding. Where bidding on alternatives is permitted, the contracting officer has the advantage of comparing the bidders on a range of materials and technical aspects, as well as on price. It is to be expected that greater economy for the contracting agency will result. However, bidders may believe that

the call for consideration of alternatives introduces too much uncertainty into bid preparation and evaluation.

Federal regulations permit alternate bidding for federally funded highway construction projects on the NHS. The FHWA suggests that alternate bidding should be used when more than one alternate is judged equal over the design life. The bidding documents should clearly indicate the design criteria and the type of alternate option, and that there is a reasonable possibility that the less costly design approach will be acceptable.³⁹¹

Whether asking for alternate bids or modified alternatives, the contracting agency's specifications must be full, accurate, and complete as to each of the alternatives. They must be presented in a manner that allows opportunity for free competitive bidding on each alternative. Where they meet these criteria, these methods of calling for bids are reconcilable with the principles of competition. ³⁹² It is not fatal to alternative bidding that the agency wants to reserve its selection of one alternative over the other after seeing the prices for each. "The very concept of alternative specification bids approved in these cases is calculated to allow the responsible government entity to weigh the costs and benefits of different types of proposals after the costs are known."

Under the best of circumstances, however, efforts at completeness and accuracy are subject to inadvertent discrepancies in the specifications. Where such discrepancies are discovered, a rule of reason applies. If they fail in some material aspect to inform potential bidders of the terms on which bids will be compared or performances required, the specifications are defective, and any contract awarded on them is subject to cancellation.³⁹⁴

Bidding on alternative specifications may be accomplished on separate proposal forms or in a single consolidated form. Instructions on the preparation of bids must be followed fully and exactly. Where a single combined bid form is used, it is customary for the instructions to require that all spaces must be filled, and all items of information must be furnished for each alternative. Failure to comply with this requirement exposes the bid to the risk of rejection because of its irregularity.³⁹⁵

q. Confidentiality of Contractor Records

Because of state and federal laws requiring full disclosure of records held by or used by public agencies, agencies and contractors must rely on specific exemp-

³⁸⁷ Id. at 496, 118 A.2d at 628.

³⁸⁸ Owensboro Grain Co. v. Owensboro Riverport Auth., 818 S.W.2d 605, 608 (Ky. 1991).

 $^{^{389}}$ Id.

³⁹⁰ 196 N.J. Super. 204, 482 A.2d 36 (1984).

³⁹¹ FHWA, *supra* note 156, § IV, Other Issues, at 5–6; http://www.fhwa.dot.gov/programadmin/contracts/coretoc.cfm.

³⁹² See J.J.D. Urethane Co. v. Montgomery County, 694 A.2d 368, 372 (Pa. Commw. 1997) and cases cited therein (alternatives requested regarding elevator or stairway).

³⁹³ *Id*. at 371.

 $^{^{394}}$ State $ex\ rel.$ Hoeffler v. Griswold, 35 Ohio App. 354, 172 N.E. 438 (1930).

³⁹⁵ Baxter's Asphalt & Concrete v. Liberty County, 406 So. 2d 461 (Fla. App. 1981).

tions from these statutes in order to assert that some contractor records are confidential. Some states provide exemptions for all documents submitted in the public bidding process. 396 Others address only the financial information submitted in the prequalification process. 397

In addition, agency records pertaining to the procurement process will ordinarily be publicly available unless protected by a specific exemption. In federal procurement in which the FARs apply, those rules prohibit the government from releasing any source selection information during procurement proceedings, including the ranking of bids, proposals, or competitors. The disclosure of this information to one bidder has been held to give that bidder an advantage over others.³⁹⁸

2. Accelerated Project Contracting Methodology

In addition to delivery systems previously discussed, numerous transportation agencies have also implemented accelerated delivery systems for traditional low-bid contracts. These include:

a. A + B Bidding and Lane Rental ³⁹⁹

Cost plus time bidding is more often called A + B bidding. This involves considering the cost of time in the low bid determination. In this method, each bid consists of two components: the "A" component is the traditional bid of all contract items and the dollar amount for all contract bid items, and the "B" component is the total number of calendar days required to complete the project as estimated by the bidder. On the bid for award consideration is based upon the combination of the bid for all contract items and the associated cost of time according to the following formula:

Bid award $cost = A + (B \times Road \ User \ Cost/Day).$

The road user cost is determined by the owner and specified in the bid package. This formula is used to determine the lowest bid for award, and not used to determine payment to the contractor. This method is in wide use, and perceived advantages include accelerating the construction schedule. Schedule reduction may also occur through the use of incentive provisions, which are often included in the same contract.

For projects with high road user impacts, the A +B method can prove to be an effective technique. It gives the contractor the flexibility to set its own completion date, and its operational efficiency is rewarded, yielding reductions in project impacts. Additional advantages include keeping projects on schedule, reducing the engineering costs of construction inspection, limiting inconvenience to the traveling public, contributing to contractor creativity, and enhancing safety. This approach is not suitable for all projects, however. 401 Principal disadvantages include increased cost, increased attention required by transportation officials when changes are encountered, and the need to ensure that quality is not compromised. Other disadvantages include difficulty in developing cost of time charges that are realistic when using two different set of rules governing time charges, higher costs than traditional bidding, additional inspection and testing personnel requirements, and generation of increased contractor claims and disputes. 402

The calculation of road user cost is necessary for any project highway using any of $_{
m the}$ tives/disincentives, lane rental fees, or liquidated damages (that include road user fees). It is a measurement of the impact the transportation facility has on the traveling public. Road user costs may include costs associated with travel time, vehicle operation accidents, and air quality. The need for defensible incentive/disincentive provisions mandate that road user costs be based upon reasonable estimates. FHWA has provided numerous studies and references that can provide guidance on developing road user costs. 403

Lane rental

Similar to cost plus time bidding (A + B bidding), the goal of lane rental is to encourage contractors to minimize road user impacts during construction. Under lane rental, a lane rental fee is specified in the contract. Lane rental provisions impose charges on contractors for closing a lane to traffic during construction. In other words, the lanes are "rented" to the contractor for the time period needed to construct the project. The contractor submits its estimated duration in its bid documents. If the contractor finishes the project during the specified period a rental fee is not charged. However, if the contractor requests additional days to finish the project, a rental fee is deducted from monthly progress estimates. The most substantial benefit is reduced traffic during construction. Disadvantages include increased construction cost, worker safety issues, and extra documentation and coordination. 404

 $^{^{396}}$ D.C. CODE § 2-354.17 (2012) (documents submitted in response to invitation for bids or request for proposals will be treated as confidential).

³⁹⁷ WASH. REV. CODE § 47.28.075 (2000).

 $^{^{398}}$ Ralvin Pacific Properties, Inc. v. United States, 871 F. Supp. 468, 472–73 (D.D.C. 1994).

³⁹⁹ Coverage of issues from Anderson & Damnjanovic, Selection and Evaluation of Alternative Contracting Methods to Accelerate Project Completion (NCHRP Synthesis 379, 2008), available at

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_379.pdf, last accessed on Sept. 7, 2013.

 $^{^{400}}$ *Id.* at 15–16.

 $^{^{401}}$ FHWA, supra note 156, $\$ IV, at 4; see http://www.fhwa.dot.gov/programadmin/contracts/coretoc.cfm, last accessed on Sept. 7, 2013.

 $^{^{402}}$ Anderson & Damnjanovic, supra note 399, at 15.

⁴⁰³ FHWA, *supra* note 156, § IV, at 9.

⁴⁰⁴ ANDERSON & DAMNJANOVIC, supra note 399, at 16.

b. Lump Sum Bidding

Although not widely used, lump sum bidding has been used by Florida DOT. Under lump sum bidding, a contractor is provided bid documents that do not contain bid quantities tables. The contractor develops its bid based on its own quantity analysis of the plans and information provided. The perceived advantages include reduced design effort to prepare bid packages, since unit item quantities are not provided, and reduced time spent by field inspectors to measure quantities. Perceived disadvantages include increased potential for front end loading, contactors adding more contingencies to bid prices, and potential contractor compromises in quality. 405 Any costs associated with changes or unforeseen conditions, as well as additional work, will be negotiated using the state's standard practices. 406 The lump sum bidding selection process, and the no excuse bonus provision, are also being employed in the Special Experimental Project (SEP)-14 for the Central Texas Regional Mobility Authority for the 5.1 mi toll facilitv.407

c. Incentive/Disincentive 408

Incentive/Disincentive (I/D) provisions are in wide use in today's transportation agencies. I/D provisions for early completion serve to motivate contractors. They permit a certain amount of compensation for each day critical work is completed ahead of schedule and assess a deduction for each day the contractor overruns the I/D time. The agency specifies the time so as to minimize traffic inconvenience and delays. I/D provisions promote faster project completion and reductions in engineering inspection costs resulting from shorter construction schedules and faster completion. Disadvantages include increased cost and potential reduction in quality, and increased problems owing to utility conflicts, change orders, and contract adjustments.

Capping payments

It is normal for contract incentive payments to be capped at a maximum amount while disincentive payments are not normally capped. The transportation agency must evaluate and balance how much it is willing to pay to accelerate the work effort and the cost to do so. Is it cost effective to do so? Incentive capping provides the agency with a predictable budget and reduces the agency's overall risk of overspending for acceleration. 409

Is disincentive a penalty?

Disincentive assessments are not penalties, but are compensation for road user delay costs. There are many methods available to estimate road user costs (RUC). According to FHWA, only one state case has invalidated an I/D specification since it was not based on RUCs and there was no language in the specification that described the disincentive as a means to recover RUCs resulting for the construction project. It appears likely that most I/D claims have been settled to avoid establishing precedent. In any event, to be successful in defending against any legal challenge asserting that disincentive is a "penalty," it would be critical that the RUC be based on reasonable estimates associated with the delay caused by the highway construction project. The RUC must be based on sound engineering practice, and should have a documented procedure for calculating RUC impacts due to construction.410

FHWA criteria for use

There is a clear distinction between I/D provisions and the purpose of liquidated damages. They have different functions. I/D provisions motivate the contractor to complete the work ahead of schedule and recover damages for late completion. Liquidated damages are intended to recover construction oversight costs and/or damage to the traveling public. In some states, liquidated damages are meant to cover only damage and inconvenience to the traveling public, while a separate assessment of "engineering charges" covers owner damages for late completion.

USDOT regulations (23 C..FR. \$.635.127) require state transportation agencies to establish liquidated damages as a minimum to recover overruns in contract time. RUCs are more extensive, are used to justify I/D, and are not liquidated damages. Although they are similar, RUCs are significantly greater than liquidated damages and extended engineering costs caused by late completion sustained by the public agency.

Time adjustment issues

The use of I/D provisions create numerous time adjustment issues. Standard contract provisions used to evaluate requests for time extensions also apply to I/D provisions, unless other express provisions control. By way of example, Florida DOT's use of a "no excuse" provision and its effect on contract extensions is somewhat different, and will be discussed later in this section. Weather risks are managed in different ways by state transportation agencies. Some transfer them all to the

⁴⁰⁵ Id. at 20-21.

⁴⁰⁶ FHWA, *supra* note 156, § IV, at 3,

http://www.fhwa.dot.gov/programadmin/contracts/sep14tx2009.cfm, last accessed June 28, 2012.

⁴⁰⁷ FHWA Web site SEP 14 Project listing, http://www.fhwa.dot.gov/programadmin/contracts/sep14list. cfm, last accessed Sept. 8, 2013.

 $^{^{408}}$ Id.

⁴⁰⁹ FICK, CACKLER, TROST, & VANZLER, TIME-RELATED INCENTIVE AND DISINCENTIVE PROVISIONS IN HIGHWAY

CONSTRUCTION CONTRACTS 31 (NCHRP Report 652, Transportation Research Board, 2010), available at http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_rpt_652.pdf, last accessed Sept. 8, 2013.

 $^{^{410}}$ Id. at 25–26.

contractor, while others share the risk by allowing time extensions for abnormal weather. Excusable delays such as plan errors, third party conflicts, and different and unforeseen site conditions are also treated in a variety of ways that warrant close examination of the contract risk allocation provisions.⁴¹¹

Types of I/D 412

Types of I/D clauses include A + B bidding, lane rental, A + B without I/D provisions (no incentive is offered for early completion nor is a disincentive assessed for late completion other than liquidated damages), and A+ B with I/D provisions (incentive is paid for early completion and disincentive charged for late completions).

I/D provisions are not to be included in all transportation projects. Projects that have unknowns such as utility conflicts, right-of-way issues, sizable excavations with unknown soil conditions, and the mandated use of innovative construction techniques and materials are not good candidates for time-related I/D provisions.⁴¹³

d. No Excuse Clauses—Florida 414

Florida DOT has examined many methods to accelerate construction of transportation facilities. It has developed a "no excuse bonus" provision that gives contractors an incentive to complete the contract work on time. The contractor is given a "drop dead date" for completion of a certain phase of the project, or for completion of the entire contract. If the contractor completes in advance of this date, it will be given a bonus. There are no excuses for any delays, such as weather delays, for not achieving the completion date. In addition there are no disincentives other than liquidated damages for not meeting the contract completion date. The perceived advantages include project acceleration, faster project completion, reduced inspection costs, a proactive enhanced safety approach by the contractor, and contractors taking on more risk. Perceived disadvantages include increased cost, possible risks involved for owner, project claims, and quality.415

Time adjustments in no-excuse contracts are treated differently than traditional time extensions. Florida has utilized an "excusable no-excuse" clause, which provides that if excusable delays have a total impact greater than 15 percent of the time remaining, then they are considered for a time extension. This appears to be a compromise position, which permits the contractor to earn a no-excuse bonus if the contractor was delayed for reasons beyond the contractor's control. This approach does not recognize small delays that could have impact. 416

e. Bidding Overhead 417

Caltrans and the contracting community developed a unique way to provide more accurately for timely overhead compensation. Special provisions for time-related overhead are incorporated into the contract as a bid item on selected contracts over \$5 million. Time-related overhead includes field and home office overhead for the time required to complete the work. In addition, the specification provides for increases in the time-related overhead bid item for suspension of work, and for the department granting an increase of contract time for a compensable delay. If the time-related bid item exceeds 149 percent of the bid quantity, the contractor is required to submit an audit examination and report by a certified public accountant. The California Department of Transportation (Caltrans) found that use of this provision limits the magnitude of time extensions and reduces the number of overhead compensation claims and use of other experts.418

Available state studies

Further information regarding the use and evaluation of alternate contracting methods can be found in Minnesota DOT's Innovative Contracting Guidelines (2005), Pennsylvania DOT's Innovative Bidding Tool Kit (2002), Ohio DOT's Innovative Contracting Manual (2006), Caltrans' Innovative Procurement Practices (2007), and Florida DOT's Alternative Contract Methods (2000). 419

3. Alternative Contracting Methods

a. Introduction—Historical Background

New attention and focus have been placed on alternate methods to shorten project delivery time. State transportation agencies have implemented new methods with the goal of not only reducing time, but also of reducing overall costs and assuring that construction facilities meet quality and safety standards.

In determining which project delivery system approach is appropriate for a given project, it is advisable to analyze the varying systems that might be available. Some state transportation agencies have formed an innovative contracting advisory committee to provide a structured approach to assist the agency in making project delivery decisions. An excellent example is the approach taken by Colorado DOT for the I-70 Twin Tunnel Project. The process assisted the DOT in determining the dominant and obvious choice of project delivery methods. The process involved analyzing project goals, delivery schedule, level of design, initial project

⁴¹¹ *Id*. at 31.

⁴¹² Id. at 31.

 $^{^{413}}$ *Id*. at 33.

⁴¹⁴ *Id*

 $^{^{\}rm 415}$ Anderson & Damnjanovic, supra note 399, at 16–17.

⁴¹⁶ FICK, CACKLER, TROST & VANZLER, supra note 409, at 31.

 $^{^{417}}$ Fick, Cackler, Trost & Vanzler, supra note 409, at 18; coverage of issues from Anderson & Damnjanovic, supra note 399.

 $^{^{418}}$ ANDERSON & DAMNJANOVIC, supra note 399, at 19; Caltrans Standard Specification 9.1.11, Time Related Overhead.

⁴¹⁹ ANDERSON & DAMNJANOVIC, supra note 399, at 32-43.

risk assessment, cost, staff experience and availability (owner), level of oversight and control, competition, and contractor experience. The committee evaluated design-build, design-bid-build, and Construction Manager/General Contractor (CM/GC) and concluded that CM/GC was most appropriate under the factors considered. 420

1. SEP-14

Beginning in 1988, FHWA developed SEP-14 to allow the states to evaluate promising contracting techniques that would not comply with normal and traditional statutory requirements. The objective of SEP-14 was to evaluate project specific innovative contracting practices undertaken by state transportation agencies that had the potential to reduce life-cycle costs while maintaining quality. The intent of SEP-14 was to provide the administrative flexibility to evaluate promising nontraditional contracting practices on selected FA projects. 421

2. Cost plus time, lane rental, design-build, warranty clauses

Since FHWA's implementation of SEP-14 in 1990, many processes that were once considered experimental, including design-build, cost plus time bidding (A+ B bidding), lane rental, and the use of warranties, have become mainstream practices across the country. After permitting states to utilize design-build contracting for 10 years, the FHWA issued a Final Rule sanctioning design-build contracting as an allowable delivery method.

3. SEP-15

Further, in October 2004, FHWA established SEP-15 to encourage experimentation in the use of public–private partnerships, and to identify for trial evaluation new public–private partnership approaches to project delivery. It is anticipated that these new approaches will allow the efficient delivery of transportation projects without impairing FHWA's ability to carry out its stewardship responsibilities to protect the environment and taxpayer. 422 SEP-15 does not replace SEP-14, which

 $^{\rm 420}$ CDOT I-70 Tunnel Risk Assessment and Project Delivery Selection, available at

is still available to evaluate experimental contract administration methods.

The objectives of the SEP-15 program are to encourage test and experimentation in the entire project development process, identify impediments of current law and regulations, and promote greater use of public-private partnerships and private investment in transportation improvements. The objectives also include development of processes and approaches to address impediments, and to evaluate and propose administrative and statutory recommendations to remove these impediments. Further discussion of SEP-15 is contained in Section 4 of this study.

4. PPP-2007

In August 2007, FHWA issued revised design-build regulations to comply with Section 1503 of SAFETEA-LU, which permits agencies to issue RFPs and notices to proceed for preliminary design work before conclusion of the NEPA process. A further detailed discussion of SAFTEA-LU and PPP is contained in Section 1.C. of this study.⁴²⁴

b. The Design-Build Method

1. Advantages and Disadvantages

Under the design-build method of project delivery, design and construction are combined in one single contract, with a single point of contact responsible for both the design and construction. The design-build contractor, which may be one contractor or a consortium of design, construction, and management firms, assumes the design risk, and agrees to construct the project according to its design dawings. 425 The design-build method permits the contractor the maximum flexibility for innovation in the selection of design materials and construction methods. Industry survey information conducted for NCHRP Project 2005, Topic 38-12, indicates that the potential benefits and major advantages of design-build implementation include substantial time savings. Managers of designbuild projects who were surveyed in a federal study estimated that project delivery reduced the overall duration of the project by 14 percent, and reduced the overall cost by 3 percent. 426 Other advantages include

http://www.coloradodot.info/projects/i70twintunnels/cmgc, last accessed on July 6, 2012. More generally, see also http://www.coloradodot.info/business/designsupport/innovative-contracting-and-design-build/documents/cmgc-cca, last accessed on July 6, 2012.

⁴²¹ See FHWA Initiative to Encourage Quality Through Innovative Contacting Practices, Special Experimental Projects No. 14 (SEP-14) on FHWA Web page, http://www.fhwa.dot.gov/programadmin/contracts/021390.cfm.

 $^{^{422}}$ See http://www.fhwa.dot.gov/ipd/p3tools_programs/sep 15_procedures.htm, last accessed Mar. 21, 2011.

⁴²³ FHWA Web information tools and programs on SEP-15, http://www.fhwa.dot.gov/ipd/p3/tools_programs/sep15_faqs. htm, last accessed Mar. 21, 2011.

 $^{^{424}}$ 23 C.F.R. 627 et al.

⁴²⁵ EDWARD FISHMAN, MAJOR LEGAL ISSUES FOR HIGHWAY PUBLIC-PRIVATE PARTNERSHIPS 5 (NCHRP Legal Research Digest No. 51, Transportation Research Board, 2009), available at http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_lrd_51.pdf, last accessed on Sept. 8, 2013.

⁴²⁶ Design-Build Effectiveness Study As Required by TEA Section 1307(f), Jan. 2006, executive summary and final report link available at http://www.fhwa.dot.gov/reports/designbuild/designbuild.htm. Last accessed Sept. 7, 2013.

reduced construction engineering and inspection costs, reduced change orders and claims, improved quality, inclusion of innovative ideas, and shortened design and construction duration. Perceived disadvantages include higher construction costs attributable to owners' increased risk exposure, owners' loss of control, fewer bidders, problems related to shifting quality control (QC) functions from the DOT to contractor, and difficult warranty enforcement.⁴²⁷

2. State Transportation Design-Build Authority

Many states have passed laws authorizing designbuild procurement. To date 42 states, the District of Columbia, Puerto Rico and the Virgin Islands have the ability to deliver design-build transportation projects. (See the Appendix H chart of states with design-build authority.) In December 2011, while preparation of the current update to this volume was under preparation, New York State enacted design-build legislation.

Design-build selection can lead to litigation. For example, after Ohio enacted design-build legislation, it then became the subject of litigation. In Trumball Corporation v. Ohio Department of Transportation, contractor TGR commenced a breach of contract suit and a declaratory judgment action, sought a temporary restraining order to stop a \$200 million public improvement project known as I-71 - I-670. The Ohio Department of Transportation (ODOT) accepted technical proposals from three contractors. The technical proposals were reviewed by ODOT and, pursuant to a detailed scoring system, were given cumulative numerical grades. The short-listed contractors who survived the rigorous process were guaranteed to receive a \$500,000.00 stipend from ODOT. Prior to opening the price proposals, TGR was notified that its Technical Proposal had been determined nonresponsive and was not given a numerical grade. TGR's proposal was not opened, and ODOT withheld the \$500,000.00 stipend. The Court of Claims denied TGR's request for a restraining order, determined that TGR did not show by clear and convincing evidence that it would suffer irreparable harm if the project were not suspended, and found that TGR had an adequate remedy at law. The court noted that the Director of ODOT has broad discretion in making the determination regarding responsiveness.429 Subsequently, after trial, the Court of Claims ruled in favor of TGR, determining that their technical proposal was responsive, and rendered a

judgment in favor of TGR on their claim of breach of contract, damages to be determined after future audit, based upon the contract provisions that provided for payment of a \$500,000 stipend after audit, whichever is lower. 430

3. Federal Laws and Regulation

As previously mentioned, design-build is authorized by SAFTEA-LU and TEA-21, and federal regulations relating to design-build are contained in 23 U.S.C. Section 635.309 and 23 C.F.R. Part 627. The regulations provide that FHWA will not authorize final design and physical construction until the project confirms that 1) that the air quality non-attainment and maintenance areas meet all transportation conformity requirements of CFR Parts 51 and 93; 2) the NEPA review process has been concluded; 3) the RFP document has been approved; 4) FHWA receives a statement either that the right of way, utility and railroad work has been completed or that all necessary arrangements will be made; and 5) if railroad, utility, and right-of-way is included, the design-builder's scope of work must include a statement concerning the scope and current status of the required services and a statement about compliance with the Uniform Relocation Acquisition Policies Act of 1970.431

The regulations provide that state highway agencies are strongly encouraged to include provisions for suspension of work, differing site conditions, and significant changes to the work in the design-build agreement.⁴³²

4. Design-Build Methods

a. Selection—Request for Qualifications, RFP

Many state transportation agencies have obtained statutory authority to construct transportation projects using the design-build methodology. Many design-build authorizing statues permit a "best value" selection process allowing not only price, but other qualitative factors to be considered when selecting the designbuilder, instead of a competitive selection process reliant solely upon the lowest bid price. Federal regulations define "best value" selection as any selection process in which proposals contain both price and qualitative components, and the award is made based upon a combination of price and analysis of qualitative factors. 433 The best value selection process allows the transportation agency to select the design-builder that best meets the combination of agency and stakeholder goals. The agency may consider important quality-related factors to include the following: the design-builder's organization of the work, experience and qualification of the

⁴²⁷ ANDERSON & DAMNJANOVIC, SELECTION AND EVALUATION OF ALTERNATIVE CONTRACTING METHODS TO ACCELERATE PROJECT COMPLETION 15 (NCHRP Synthesis 379, Transportation Research Board, 2008).

⁴²⁸ Jeffrey Buxbaum & Iris N. Ortiz, Public Sector Decision Making for Public-Private Partnerships 9 (NCHRP Synthesis 391, Transportation Research Board, 2009),

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_391.pdf.

⁴²⁹ Trumball Corp. et al v. Ohio Dep't of Transp., Court of Claims of Ohio, Case No. 2011-06943, Nov. 15, 2011.

 $^{^{430}}$ *Id*.

^{431 23} C.F.R. 635.309

^{432 23} C.F.R. 635.109.

^{433 23} C.F.R. 636.103.

firm and personnel, proposed management scheme, design and construction technical solutions, past performance, backlog, and financial capacity. The manner in which these selection factors, including price as well as other factors, will be weighed must be determined early in the procurement process before issuing the RFP. Typical state statutes establish a two-step selection process in which the first step is a Request for Qualifications (RFQ), and the second step is an RFP. At the RFQ stage, the transportation agency selects the top qualified companies to submit a detailed proposal along with a cost proposal. Federal design-build regulations suggest that the following factors be considered in phase one of selection: scope of the work, and weighted factors including technical approach, technical qualifications such as specialized experience, technical competence, and past performance capability.⁴³⁴ Phase two criteria include both technical and price proposals. The regulations provide that all factors and significant subfactors and their relative importance must be clearly stated and described in the solicitation.⁴³⁵ Agencies may then be allowed further discussion in selecting the best proposal, and are not required to select the lowest cost proposal.

b. Contract risk identification and allocation

A systematic approach to risk identification and management can reduce the contract price and avoid future contract disputes.

Once risk is identified, the transportation agency can evaluate measures to mitigate possible impact and determine how to allocate risks amongst the various parties. In general terms, the risk should be allocated to the party that can best take steps to control and manage the effects of such risk. The federal design-build regulations divide risk into several categories, which include government risk, regulatory compliance risk, construction phase risk, post-construction risks, and right-of-way risks. Government risks include the potential for delays, scope changes, or additions and modifications. Regulatory compliance risks involve environmental issues and third-party issues such permitting, railroad, and utilities. Construction-phase risks include differing site conditions, traffic control, public access, and weather and schedule. Postconstruction risks include public liability and meeting specified performance standards. Right-of-way risks include acquisition costs, appraisals, relocation delays, and court costs.436

Other risks that should be allocated include security, financing, time/completions, force majeure, third-party litigation, community opposition, and destruction/casualty. The results of the risk analysis process should be used in preparing the design-build contract provisions and agreements with stakeholders and other

third parties.⁴³⁷ A further detailed discussion of risk allocation is contained in this volume's discussion of PPP, below.

$c.\ Stipends$

The cost of preparing proposals can constitute a considerable financial burden upon proposers. Providing a stipend helps cover a portion of the costs, and can provide an effective financial incentive that can increase competition. The stipend rarely covers the full cost of proposal preparation. Industry surveys show stipends range between 0.1 percent and .25 percent of the proposed cost, and thei availability and terms of use should be identified in the RFQ and RFP.

In exchange for the stipend, however, the agency should become the owner of the work product prepared by the proposer, even if the proposal is not ultimately selected.

The stipend serves to encourage highly qualified proposers to participate in the procurement, increase the quality of proposers, compensate unsuccessful proposers for a portion of the cost of preparing, and encourage participation in future design-build procurement.⁴³⁹

d. Incentive / Disincentive

The use of incentives, either alone or in combination with disincentives, can be an effective tool for assuring project quality. The type and amount of incentive will depend on the nature of the project, and on the goals and concerns of the transportation owner. Some designbuild contracts contain performance based incentives rewarding the design builder at certain intervals or milestones, or for meeting predetermined performance criteria for quality, safety, etc. 440 The Alaska Way Viaduct agreement, for example, provides incentives for completion prior to the completion deadline. The agreement provides that if the design builder achieves substantial completion before a 316-day calculated time period, it shall be entitled to an incentive of \$100,000 per day up to a maximum amount of \$25,000,000. The incentive payment would be added to the total compensation via a change order, would be payable at the time

^{434 23} C.F.R. 636.204.

⁴³⁵ 23 C.F.R. 636.209.

^{436 23} C.F.R. 636.114.

⁴³⁷ NYSDOT, Design-Build Procedures Manual Vol. 1, Sept. 2008, at 12–16. Practical experience and common sense also suggest that it might possibly be wise to consider, and to allocate contractually, the risk of criminal fraud by subcontractors or suppliers, the risk of such fraud passing initially undetected due to bribery of inspectors, and the potentially substantial costs of correcting belatedly discovered fraud-related noncompliance with technical specifications critical to the safety and durability of the completed structure or facility.

⁴³⁸ Design Institute of America, DBIA Position Statement, Use of Stipends, http://www.dbia.org/resource-center/ Documents/ps_stipends.pdf.

⁴³⁹ NYSDOT, supra note 437, at 17.

 $^{^{440}}$ MICHAEL C. LOULAKIS, DESIGN-BUILD FOR THE PUBLIC SECTOR 252–53 (Aspen Publishers, New York, 2003).

of final payment, and would not affect the contractor's obligation to pay liquidated damages, which would be capped at \$75,000.000.441 Further discussion of I/D provisions is addressed in the Section 1.C., discussion of

e. Insurance

Design-build contracts generally contain insurance requirements identical to those of traditional designbid-build contracts. Transportation contracts require commercial general liability, commercial auto liability, worker's compensation, and, if applicable, professional liability and builders risk protection. A further discussion of insurance requirements is contained in Section 7 of this study.

In the traditional design-bid-build situation, insurance for projects is normally covered under the contractor's procured insurance policies. In the design-build arena, other forms of insurance should be considered, including Owners' Controlled Insurance Programs (OCIPs) or Contractor Controlled Insurance programs (CCIPs).

OCIPs can be an effective way to improve safety and reduce the costs of insurance for large projects. Basic features of an OCIP are: 1) the owner purchases the insurance coverage to cover all contractors and subcontractors;(2) there is an integrated owner-contractor managed safety program; and 3) claims are centrally processed. OCIPs are able to achieve savings through the use of lower bulk insurance rates, improved safety management, and reductions in disputes between contractors as to who is liable for loss.⁴⁴²

Wrap-up insurance, which includes OCIPs and CCIPs, may also provide savings and improve claim management and loss control. If an OCIP is used, the transportation agency is responsible for procurement of an insurance broker and the creation of the OCIP program. The OCIP program will include all the general and professional liability and other insurance for the project. All contractors and subcontractors would be contractually required to participate in the program, and to delete insurance costs from their overhead. If a CCIP is used, the design-builder is required to provide an insurance program that covers the design-builder and its subcontractors. The design-builder would be responsible for administration of the CCIP and insuring that all subcontractors do not include insurance costs in their overhead.

Professional liability requires special attention. If the standard insurance program is used, it is the design-builder that should obtain and maintain, for the full duration of the project, a professional liability policy

last accessed Sept. 8, 2013.

in the name of the design-builder. It is not acceptable effort for the design-builder to rely on the insurance policy or policies of its designers to cover professional liability. The design-builder is the entity under contract with the owner, and the owner will look to the designbuilder for responsibility.443

f. Warranties

Federal regulations provide that state highway agencies may include warranty provisions in projects on the NHS. Federal regulations exclude maintenance items from federal participation. They provide that no warranty will be approved if, in the judgment of the Division Administrator, it may place an undue obligation on the contractor for items over which the contractor has no control.444

The design-build contract may also contain general warranty provisions covering all work on a project and/or component-specific warranty (extended warranty) on selected items such as pavement or struc-

General warranty provisions have been limited to a maximum of 2 years, 445 and should be covered in the contract documents. Extended warranties may extend beyond the general 2-year warranty requirements and will be limited to the design-builder's ability to obtain bonds covering the extended warranty period. Warranty provisions may be difficult to enforce if the transportation agency is not able to substantiate that it has maintained the roadway within the specified standards or has permitted activities that have caused distress or damage.446 Federal requirements for design-build warranties provide that warranties may not include items of routine maintenance that are not eligible for federal participation. FHWA regulations provide that warranties are short, generally 1 to 2 years; however, projects developed under PPP agreements may include warranties that are appropriate for the terms of the agreement. The regulations also permit alternate warranty proposals in best value selections, and the alternates must be in addition to the warranty in the base proposal.447

In design-build contracts where the design-builder has been given flexibility in determining means and methods, warranty specifications can provide a real quality incentive to the design-builder in addition to

⁴⁴¹ State of Washington DOT SR 099 Bored Tunnel Alternative Design Build Project, § 13.3.

 $^{^{\}rm 442}$ FHWA memorandum Oct. 7, 2002, Owner Controlled Insurance Program Policy, see http://www.fhwa.dot.gov/programadmin/contracts/100702.cfm,

⁴⁴³ NYSDOT, supra note 437, at 20-21.

^{444 23} C.F.R. 635.413.

⁴⁴⁵ See 23 C.F.R. 635.413.

⁴⁴⁶ NYSDOT, supra note 437, at 88-90. Note that one potential factor to consider in this regard is that a warranty may become meaningless if a contractor goes bankrupt and ceases doing business after the project has been completed, if any warranty bond has expired or has been suspended due to nonpayment of premiums, and if there are no significant remaining assets or closely affiliated business entities against which enforcement of the warranty may be pursued.

^{447 23} C.F.R. 413.

providing protection to the owner. If the transportation agency is overly prescriptive and provides the design solutions, however, and the design-builder constructs the project according to the means and methods specified by the agency, it may be difficult to enforce the warranty. 448

g. QA/QC

QA/QC are controversial topics in the design-build arena. Design-builders are concerned that the "traditional" inspectors would not comprehend the differences between the design-build and traditional projects and would likely delay the project schedule. They have asserted that the contracting community is capable of providing this service. Design-build contracts often require that the contractor will provide QA/QC functions as a contract deliverable in accordance with the owner's approved program.

Project approaches to this issue vary. Some project owners are reluctant to depart from the traditional inspection approach and include extensive provisions regarding quality control and assurances as well as incentives and disincentives associated with quality issues. Some contracts require the QA functions to be performed by otherwise nonaffiliated firms not associated with the design-builder. Some contracts require the QA firm to report to senior management instead of to the project manager and/or project owner in addition to the design-builder. 449

- 5. Significant Design-Build Projects
- a. Highways

1. Maryland DOT, ICC Connector 450

In the East, the Intercounty Connector (ICC) is an 18-mi, 6-lane design-build toll highway under construction in Maryland. Engineering News-Record selected the project as the region's best overall project in 2011, and an example of a high level of environmental stewardship demonstrated on a transportation project. ⁴⁵¹ On Contract A, the DB team instituted a turtle management plan that saved and managed hundreds of turtles during the 4-year construction schedule . The roadway links the areas between the I-270/I -370 and I-95/U.S. 1 corridors with central and eastern Montgomery County and Prince George's County. The finished project will

have variable fully electronic toll structures based upon peak and off-peak travel times. The funding sources include Maryland Transportation Authority revenue bonds, Treansportation Infrastructure Finance and Innovation Act (TFIA) loans, the Maryland Transportation Trust Fund, and the State of Maryland General Fund. 452

The Maryland State Highway Administration conducted less quality assurance oversight than under a typical design-bid-build project, transferring more of the responsibility to the design-build team. The team used more than 35 full-time independent quality control professionals in planning and measuring quality as the work progressed. 453

This \$2.4-billion, 18-mi project also includes reconstruction of two major interchanges. This design-build project was greatly accelerated, and broke ground in July 2007. Four of the five design-build contracts have been completed and 17 of the 18 mi opened in November 2011.

2. I-15 Reconstruction, Utah

The use of design-build methodology was successfully demonstrated by the Utah Department of Transportation in the \$1.63-billion construction of 17 mi of I-15 and associated facilities through Salt Lake City. The design-build method was selected for the project because of the immense public pressure to complete the project before the 2002 Winter Olympics. The I-15 project was Utah's first design-build project. Since the project was funded with federal funds, Utah obtained FHWA approval under SEP-14. The project included construction or reconstruction of more than 130 bridges, reconstruction of 7 urban interchanges, the reconstruction of 3 major Interstate junctions, and construction of an extensive region-wide advanced traffic management system. State procurement laws were amended to authorize the use of design-build clearly, and to permit award to a firm that provided the best value proposal to the State. Utah estimated it would take 10 years to complete the project under the traditional low-bid method approach; however, the design-builder completed the project in 5 years and \$32 million under budget.454 The use of performance specifications as opposed to prescriptive specifications encouraged innovation in design and construction, and Utah DOT also derived \$30 million in savings by utilizing an OCIP.

⁴⁴⁸ NYSDOT, supra note 437, at 88.

Anncy Smith, Getting It Right: How to Structure Complex Projects to Allocate Risks and Minimize Disputes, (Oct. 11, 2011). See http://www.nossaman.com/getting-right-how-structure-complex-projects-allocate, last accessed Sept. 8, 2013.

 $^{^{450}}$ Fick, Ells, Cackler, Trost, & Vanzler, supra note 409.

⁴⁵¹ Bruce Buckle, *Maryland Highway Takes the Eco Friendly High Road*, ENR, New York Regions Best Project 2011, Nov. 7, 2011, at 62–63.

⁴⁵² Case Studies Intercounty Connector, see http://environment.fhwa.dot.gov/projdev/travel_landUse/icc-case-study/icc-case-study.htm and http://www.iccproject.com/PDFs/2011 ICC Financial Plan S.pdf.

⁴⁵³ Buckle, *supra* note 451, at 63.

⁴⁵⁴ FISHMAN, *supra* note 425. *See also* FHWA Office of Innovative Program Delivery, Project Profiles Table: I-15 Corridor Reconstruction project.

 $http://www.fhwa.dot.gov/ipd/project_delivery/resources/general/report_to_congress_2011_table.htm.$

3. E-470

The E-470 design-build project for Denver's E-479 Public Highway Authority consisted of a 47-mi four-lane toll highway developed in four segments, which commenced in 1995. The project connects the E-470 at I-25 south of Denver, passes along the western edge of Denver International Airport, turns back towards the west, and terminates at I-25. The project cost \$1.23 billion and is supported by revenue bonds backed by toll receipts and registration fees. The project was completed in 2003, and represents one of the first roads in the nation built under PPP. The roadway project was built under budget. The completed road contains many innovations including electronic toll collection. 455

b. Transit Projects

1. Hudson-Bergen Light Rail (New Jersey)

This \$ 2.3-billion project was to design-build, operate, and maintain a 20-mi light rail transit system in New Jersey for New Jersey Transit and the New Jersey DOT. Awarded in 1985, the project included 16 stations, several station extensions, and 45 light rail vehicles, and was completed in 2000. The Hudson-Bergen Light Rail is owned by New Jersey Transit and operated under a Design-Build Operate and Maintain contract with Washington Group International (formerly Raytheon Infrastructure). The contract provides for a 15-year operation and maintenance term. The project was successfully completed in January 2003, and several other expansions have since been completed. The initial segment was opened in 2000, nearly 5 years ahead of projections, and the project realized cost savings of over \$300 million.456

2. Hiawatha Light Rail (Minnesota)

The Hiawatha Light Rail Transit was a \$715 million design-build contract for an 11.6-mi light rail line serving 17 stations in Minneapolis, Minnesota, and linking downtown Minneapolis-St. Paul International Airport and the Mall of America. The corridor was 12 mi in length, with 17 stations, and required building 24 light rail vehicles. The design-build method was utilized for two separate design build-contracts, one for light rail vehicles and one to place rail, signal, and communication equipment along the alignment. The project en-

455 USDOT Report to Congress, App. D, at 144–45. See http://www.fhwa.dot.gov/ipd/project_profiles/co_e470.htm.

tered revenue service in 2004 and carried 92,000 passengers in its first week of operation. 457

6. Other Issues

a. Design Responsibility—Fru-Con Case

Controversy has arisen concerning the designbuilder's design responsibility and the effect of agency reviews, tests, and approvals. Do such owner activities relieve the design-builder of liability? Many contracts contain provisions specifying that the contractor retains liability for any defects in the project notwithstanding the actions of the owner. Assuming the contract contains appropriate provisions, it should be sufficient to overcome the design-builder's argument that the owners' actions relieve it from liability. Transportation agencies and owners should avoid directing the contractor to design and construct the project in a particular way (providing design specifications), which would create an implied warranty, raising obstacles that might affect the holding that owners' actions do not relieve the design-builder from liability. 458

A similar issue was addressed in *Fru–Con Construction v. United States.*⁴⁵⁹ The contract documents assigned the Contractor the responsibility to design a detailed blasting plan. The court noted that the government's approval of the submittal did not relieve the contractor of its contractual duties. The court referenced the specific contract provision that specified that approval of submittals did not relieve the contractor of the responsibility for any error that may exist and the contractor as still responsible for the design of adequate connections and satisfactory completion of the work.

b. Limits of Liability

Some design-build agreements limit liability to a certain fixed amount specified in the agreement, while others contain no limits on liability. Design-build agreements often exempt from this liability limit criminal acts as determined in a court of law, intentional fraud, or misconduct. A more detailed discussion is contained in this volume's discussion of PPP, below.

7. Further Resources

AASHTO References

The AASHTO Guidance for Design Build Procurement, issued in January 2008, represents an excellent resource for design-build information.

⁴⁵⁶ USDOT Report to Congress on Public Private Partnerships, at 38; see also FHWA Project Profiles, Hudson-Bergen Light Rail.

 $http://www.fhwa.dot.gov/ipd/project_profiles/nj_hudson_bergen.htm.$

 $^{^{457}}$ USDOT, supra note 456, at 151–2. See http://fhwa.dot.gov/ipd/project_profiles/mn_hiawatha.htm, last accessed Sept. 8, 2013.

 $^{^{458}}$ Smith, supra note 449; Loulakis, supra note 440, at 258–59.

⁴⁵⁹ 42 Fed. Cl. 94, 97 (1998).

Best Practice Studies

In September 2005, the NYSDOT issued a Design Build Procedures Manual consisting of five volumes of text, exhibits, and forms and templates that can be a useful resource for further inquiry into the design-build arena.

c. Public-Private Partnerships and Project Finance

1. Historical Basis of PPPs

The USDOT Report to Congress on Public–Private Partnerships, submitted to Congress in 2004, defines a PPP as a contractual agreement, formed between public and private sector partners, which allows more private sector participation than is traditional. The agreement usually involves a governmental agency contracting with a private company to renovate, construct, maintain, and/or manage a facility or system."⁴⁶⁰

PPPs are not new concepts for transportation infrastructure development. PPPs date back to 1792 with the development of the private Philadelphia and Lancaster Turnpike in Pennsylvania.⁴⁶¹

In the late 1980s, states began to explore greater private sector participation in highway development with the legislative authorization of Virginia's Dulles Greenway project, followed by the Pocahontas Parkway in Virginia and the Southern Connector in South Carolina.

In 1990, FHWA created SEP-14 allowing, for states to experiment with innovative contracting options such as cost plus time, bidding lane rental, and the use of warranties.

In 1991, Congress passed ISTEA, landmark legislation that established new priorities while raising funding to a new level. ISTEA drew attention to environmental and community needs, established and funded CMAQ, and encouraged stakeholder participation. It also allowed for more flexibility in the comingling of FA funds, and allowed toll credits to apply toward the nonfederal match. Prior to this change, tolls were not allowed to be applied for the nonfederal match. 462

In 1998, TEA-21 was passed to increase further flexibility in funding. It added new funding features, which included State Infrastructure Banks (SIBs) and TIFIA to provide credit assistance to major projects of national significance. It also expanded the toll credit to 100 percent cost of the project, and permitted toll facilities that could be operated by a private toll authority. 463

In 2004, USDOT submitted a detailed report to Congress on the potential use of PPPs for the funding and construction of future surface transportation capital projects.⁴⁶⁴

In 2004, FHWA also created SEP-15 to identify for trial evaluation new PPP approaches to project delivery. 465

The objectives of SEP-15 programs are to encourage experimentation in the entire project development process, identify impediments in current law and regulations, and proactively promote the greater use of PPPs and private investment in transportation improvements. SEP-15 also develops processes and approaches, addresses impediments, and evaluates and proposes administrative and statutory recommendations. The objectives of SEP-15 are also to increase project delivery flexibility, encourage innovation, improve project delivery time, and promote PPPs. It permits FHWA to identify current FHWA regulations, laws, and practices that may inhibit greater use of PPPs, and allows the FHWA to develop approaches and procedures that address the impediments. Here

Eligible projects are defined as projects that will advance the goals of the SEP program and that will test innovative delivery techniques prohibited by current provisions of Title 23 U.S.C. and FHWA rules and regulations.

The process requires project sponsors (which may include state agencies, localities, and public-private transportation ventures) to submit applications that provide a brief description of the project and the specific areas of experimentation, explain innovative techniques and their expected value, and identify proposed performance measures to evaluate success of the SEP-15 project.⁴⁶⁸ If acceptable, the project sponsors will make a formal presentation of the SEP-15 application and address any questions. The FHWA will work with the public and private sponsors to draft an Early Development Agreement (EDA). The EDA should contain key elements of project planning and design, regulatory compliance, timelines, financing, construction, and operations. Upon completion of the major milestones, the public-private sponsors are required to submit a report that summarizes the lessons learned from the SEP-15 process, and includes recommended statutory and regulatory changes with an explanation of how the changes will improve the delivery of the FA highway program. 469

The SEP-15 Steering Committee is responsible for overall management and oversight. The Steering Committee proposes SEP-15 project cofacilitators, provides recommendations regarding applications, manages development of documents and promotional materials,

⁴⁶⁰ USDOT, supra note 456.

 $^{^{461}}$ *Id.* at 15.

⁴⁶² University Transportation Research Center, NYSDOT, Partnership for New York, Briefing Paper, Mar. 8, 2006, at 5.

⁴⁶³ *Id.* at 6.

 $^{^{464}}$ USDOT, supra note 456.

⁴⁶⁵ See http://www.fhwa.dot.gov/ipd/p3/tools_programs/sep15.htm, last accessed Sept. 8, 2013.

⁴⁶⁶ See http://www.fhwa.dot.gov/ipd/p3/tools_programs/sep15_faqs.htm, last accessed Sept. 8, 2013.

 $^{^{467}}$ Id.

⁴⁶⁸ See Frederick C. Wright, Jr., Action: SEP-15 Application Process, FHWA memorandum, Oct. 14, 2004, available at http://www.fhwa.dot.gov/programadmin/contracts/101404.cfm, last accessed Sept. 8, 2013.

 $^{^{469}}$ Id.

and develops training courses relevant to the administration of SEP-15 projects.

Evaluation and selection criteria include whether the proposed experimental feature is prohibited under current policies and procedures, and whether the parameters of the experimental feature extend beyond procurement issues of SEP-15. (See 69 Federal Register 59983, September 23, 2004.) Evaluations will also focus on whether the experimental features improve the delivery time, quality, or expense of the project, and could influence FA policy and procedure. In addition, a plan to evaluate how the experimental feature contributes to the overall success of the project will be reviewed.

If approved, the Early Development Agreement is developed jointly between the State DOT and FHWA, describing the parameters of the experimental features. The EDA will identify the specific role of the parties, define procedures, and establish time frames for each experimental feature.

It should be noted that SEP-15 may not be used to experiment outside Title 23, nor can it be used to experiment with state law. Other than areas governed by Title 23 of the U.S. Code, applicants must comply fully with State and Federal laws and regulations, such as NEPA and other environmental requirements.

In 2005, Congressional passage of SAFETEA-LU continued the progression of more flexibility for private sector involvement. 470 It included express provision, SAFETEA-LU Section 3011, for a Public-Private Partnership Pilot Program.471 It provided expanded use of private activity bonds in which interest was not subject to federal income tax, thus reducing project financing costs, and further enhanced authority to use tolling to finance construction of Interstates. SAFETEA-LU amended the Internal Revenue Code to allow taxexempt private activity bonds (PAB) for privately developed and operated highway and freight facilities, authorizing up to \$14 billion through 2009. It also increased the flexibility for using design-build by eliminating the \$50 million floor on the size of a designbuild contract, and allowed PPPs to apply directly for TIFIA funds.472

These aforementioned laws encouraged states to pursue PPPs for transportation projects by establishing pilot programs and innovative finance mechanisms, and by adding tolling flexibility.⁴⁷³

As the 2014 update to this volume was in advanced draft form, Congress passed and President Obama signed into law MAP-21, discussed earlier in Section 1 of this volume. It appears that this legislation may require the Secretary of Transportation to take certain administrative actions in support of broader use of PPPs.

2. Chart of States With PPP Legislation

There are 23 states that have enacted PPP authorizing legislation. $^{474}\,$

3. Types of PPP Projects—Brownfield and Greenfield

There are two different types of transportation infrastructure suitable for PPP projects, which have been categorized as "brownfield "and "greenfield" projects. The development and construction of a new facility is generally referred to as a greenfield project, while the operation and maintenance of an existing facility is referred to as a brownfield project. Generally, greenfield projects will be more complex and expensive than brownfield projects, because of the need to plan, design, and build a new transportation facility.⁴⁷⁵

Today's transportation agencies use many different forms of PPPs, which include:

a. Design-Build

Under design-build (DB) contracting the design and construction are combined into a single point of contact. The DB contractor may be one company or a consortium of design, construction, and management firms. Innovation is encouraged by the use of performance specifications rather than traditional prescriptive specifications. Some DB contracts contain lengthy warranty provisions and shift the risk of project quality assurance to the private contractor.

b. Design-Build-Operate-Maintain

Under Design-Build-Operate-Maintain (DBOM), the private contractor is responsible for design and construction and also for operation and maintenance for a fixed period of time. The DBOM contractor agrees to meet owner-specified performance standards involving management of the asset's capacity and congestion management. Examples include the Hudson Bergen Light Rail project in New Jersey and the I-15 project in Utah.

c. Design-Build-Finance-Operate

The Design-Build-Finance-Operate (DBFO) contractor is a variation of the DBOM process that involves the DBOM operator in financing the design, construction, operation, and maintenance of the facility. Generally, the DBFO model uses tolls or other pricing mechanisms to repay the financing used to build the facility. Examples of DBFO include Las Vegas monorail SR-91 and SR-125 California.

d. Build-Operate-Transfer

 $^{^{470}}$ SAFETEA-LU, Pub. L. No. 109-59, 119 Stat. 1144 (2005).

 $^{^{471}}$ SAFETEA-LU \S 3011, 49 U.S.C. \S 509 note, Pub. L. No. 109-59, 119 Stat. 1144, 1588.

⁴⁷² BUXBAUM & ORTIZ, *supra* note 428, at 6-7.

 $^{^{473}}$ Id. at 9.

⁴⁷⁴ See App. I.

⁴⁷⁵ Fishman, *supra* note 425, at 4.

The Build-Operate-Transfer (BOT) approach is similar to DBFO except that the contractor retains ownership of the transportation facility after the completion of the operating and maintenance phase of the contract.

4. Financing PPPs

There are several financing tools available to private sector groups desiring to provide debt or equity financing for transportation projects. In addition to a standard financing mechanism that includes lines of credit and loan guarantees, private-sector consideration can be given to the following:

a. TIFIA and GARVEE

The TIFIA program was enacted in 1998 as part of TEA-21. Notably, the TIFIA program has reportedly been continued and enhanced with additional funding and revisions to administrative eligibility criteria under MAP-21, enacted in 2012. 476 TIFIA allows USDOT to provide direct credit assistance to the sponsors of major transportation infrastructure projects. The TIFIA credit program provides direct loans, loan guarantees, and standby lines of credit. TIFIA assistance may be for public and private entities and can only support 33 percent of project costs for projects with cost of \$100 million or 50 percent of the state's federal aid highway apportionment. 477 As of June 2004, \$3.5 billion in TIFIA project assistance had been made to 11 projects, supporting \$15 billion in project costs.

Grant Anticipation Revenue Vehicle (GARVEE) is a debt-financing mechanism authorized by 23 U.S.C. § 122. GARVEE allows a state or political subdivision or public authority to pledge future federal-aid highway funds to support debt financing costs. GARVEE enables debt-related expenses to be paid with future federal aid. The GARVEE financing mechanism enables states to generate, through the sale of GARVEE bonds, up-front capital for major highway projects earlier than it could using the traditional pay-as-you-go funding mechanism. Many states have participated in this program, including California, Idaho, Colorado, Ohio, Oklahoma, Arizona, New Mexico, Alabama, Alaska, and Arkansas. 478

b. Private Activity Bonds

PABs are a form of tax-exempt bond financing that can be issued on behalf of a state or local government to provide financing for qualified projects. Currently there are \$15 billion in tax-exempt PABs that are not subject to the state agency general cap on PABs.

c. 63-20 Public Benefit Corporations

63-20 public benefit corporations are nonprofit corporations created pursuant to Internal Revenue Service Rule 63-20 and Revenue Procedure 82-26, which are authorized to issue tax-exempt debt on behalf of private developers. The nonprofit must engage in activities that are "public" in nature, the state or political subdivision must have a "beneficial interest" in the corporation, and unencumbered legal title in the financed facilities must vest in the government until the bonds are paid.

d. State Infrastructure Bank Credit Assistance

SIBs are revolving funds that are administered by the states to support transportation projects. They provide low-interest loan and loan guarantees to public or private sponsors of federally aided highway projects. A SIB functions like a bank by offering loans and other credit products to private and public PPP sponsors, and has been expanded to 38 states and Puerto Rico. Since 2004, 32 states have entered into 373 SIB loan agreements with a dollar value of \$4.8 billion.

e. Tolls

Direct tolls on highway users are another useful financing tool for PPP. Flat-fee tolling, variable pricing, and congestion pricing are all in the mix that can provide positive cash flow to invest in new capacity or reinvest in existing systems.

i. Availability payments and shadow tolls

Shadow tolls are another variation of tolling which support private financing of highway projects. In return for the "shadow toll," the contractor agrees to design, build, and operate or maintain the facility. The shadow toll is payment equal to the amount of toll that would have been imposed on the users of the facility if a direct user fee was implemented.

Another variation is the use of availability payments to compensate a private contractor for the cost of designing and building a transportation facility. The availability payment is a regular (monthly) payment made to the concessionaire contractor during the operation and maintenance phase in exchange for providing a project for public use of a predetermined level of capacity and quality. Availability payments do not depend on traffic volume, but are an agreed-upon regular payment during the operating and maintenance phase less any deductions assessed for failure to meet performance standards or quality or safety requirements. Availability payments start once the project is open, which provides an incentive for timely completion. The Port of Miami tunnel discussed later in this section is funded with availability payments

⁴⁷⁶ For text of, and Conference Committee report on, MAP-21, see *supra* note 25. For link to news article reporting continuation of TIFIA under MAP-21, *see* Goad & Hurst, *supra* note 24.

 $^{^{\}rm 477}$ USDOT, supra note 456, at 30–31.

⁴⁷⁸ Id. at 24-26.

- 5. Sample Projects
- a. Long-Term Lease Concessions
- i. Chicago Skyway

The \$1.83 billion PPP for the Chicago Skyway, finalized in January 2005, focused intense media attention and sent shockwaves thought the international transportation community. The consortium of Cintra-Maguarie submitted the winning bid, entered into a 99year lease, and, in exchange for the right to toll revenue, the concessionaire also agreed to perform certain capital improvements, install an electronic toll collection system, and improve the Skyway's traffic. The terms of the lease provided that tolls could be increased according to the consumer price index (CPI) or a negotiated rate schedule. The agreement also required the consortium to comply with City of Chicago hiring policies with respect to residency preference, minority contracting, etc.

The lease provided that the consortium would assume all legal liability for the operation and maintenance of the facility. Within the first 6 months, the electronic toll system, and newly hired toll collectors at lower hourly wages, cut operational costs, and dramatically increased traffic and transactions, and reduced congestion. The City of Chicago planned to use the \$1.83 billion to repay general obligation debt, fund \$100 million of visible programs, fill a budget shortfall, and fund \$500 million in city reserves.⁴⁷⁹

ii. Indiana Toll Road

Following on the Skyway, a PPP was entered into on the 157-mi Indiana Toll Road operated by the Indiana DOT. The same consortium of Cintra-Maguarie submitted the \$3.8-billion winning bid for the 75-year term. The long-term lease agreement required state legislative approval and was signed into law in March 2006. The final terms of the lease require the consortium to fund \$700 million worth of capital improvements in the Indiana Toll Road including an electronic toll system. The agreement also contained a noncompete clause that prohibits the funding of a transportation improvement within a 10-mi radius of the Indiana Toll Road. The legislation also authorized step toll increases based upon a schedule approved by the legislature. Unlike the Skyway provisions, the \$3.8 billion was required to be used for transportation-related activities. Indiana planned to retire toll road bonds, establish a trust fund for future Indiana DOT projects, and fund the "Major Moves" Construction Program. 480

b. Availability Payments—DBFO (Case Studies)

iii. Port of Miami Tunnel, Florida

The Port of Miami Tunnel project involves the construction of a new direct access highway connection between I-395 and the Port of Miami. The main component of this \$1.4-billion project is the construction of twin tunnels that will be bored under the shipping channel in downtown Miami. The project is a DBFOM project funded by "availability payments" instead of tolls. Construction began in May 2010 and is expected to be complete in 2014.

The availability payments of \$33 million per year were to be distributed by Florida DOT over a 30-year term of the operating contract, unless performance standards relating to lane availability and service quality and safety were not met. This approach provided incentives for timely completion of the facility, since the payments did not start until construction was complete. The consortium was also to receive \$100 million in progress payments during construction from 2010 to 2013 and \$350 million from Florida DOT when the project was complete. At the conclusion of the term, the consortium would hand back the facility to Florida DOT, and at that time might be required to correct any deficiencies.⁴⁸¹

iv. Pocahontas Parkway, Virginia, SR-895—63-20 Public Benefit Corporations

The Pocahontas Parkway is an 8.8-mi 4-lane toll road that connects I-95 with I-295, also known as SR-895, near the Richmond International Airport. This project was the first construction project implemented and completed under Virginia's innovative Public—Private Transportation Act of 1995 (PPTA).

The Pocahontas Parkway proved to be an object lesson in the risks both of overoptimistic traffic volume and toll revenue estimates, and of poor risk allocation in PPP contract drafting and negotiation.

It was completed in September 2002 for \$314 million, \$10 million below the original \$324-million contract. The Virginia DOT established a 63-20 public benefit corporation, the Pocahontas Parkway Association (PPA), to finance the development of this toll facility by using tax-exempt bonds, obtaining funding from Virginia's Infrastructure Bank, and obtaining federal funds for design costs. After completion, unfortunately, the PPA experienced serious financial difficulties during operations as traffic volumes were significantly lower than projected and toll revenues produced only half the forecast amount. In 2004, while the facility was producing \$7 million in annual toll revenues, and the PPA had roughly \$2.2 million from investment income

⁴⁷⁹ Fishman, *supra* note 425, at 9–10.

⁴⁸⁰ Id. at 10-11.

 $^{^{481}}$ $\it Id.$ at 16–17. See also FHWA project profile, http://www.fhwa.dot.gov/ipd/project_profiles/fl_port_miami_tunnel.htm.

 $^{^{482}}$ USDOT, supra note 456, at 147–8.

on its reserve account, annual facility costs were on the order of \$30 million—\$25 million for debt-carrying costs, \$2.8 million for amortization, \$2 million for operating and maintenance costs, and \$0.7 million for PPA administrative costs. The net shortfall was on the order of \$21 million per year. While much of this fell on the PPA, Virginia DOT apparently absorbed on the order of \$2 million per year in unanticipated operation and maintenance costs. \$483 By 2006, the PPA reportedly had debts totaling \$522 million—for the construction of a \$314 million highway. \$484

In June 2006 the Virginia DOT negotiated an agreement with an Australian toll road operator, Transurban, under which Virginia DOT granted a 99-year lease concession for Transurban to acquire the PPA's rights to the Pocahontas Parkway through a specialpurpose entity for the price of \$458 million, and to manage, operate, and maintain the Parkway, and collect the tolls. (It is unclear how the PPA was able to pay off the remainder of its \$522 million in debts.) In addition, Transurban agreed to construct a 1.58-mi extension to the Richmond International Airport conditioned on TIFIA financing. The agreement gave Transurban the right to set toll rates, but capped them at specified maximum amounts. Transurban took over maintenance responsibilities and costs from Virginia DOT, and agreed to give maintenance expenses priority over creditors. Under the new agreement, Transurban assumed the full risk for traffic volumes and toll revenues, and Virginia DOT made no guarantees. While the agreement involved a 99-year lease, the State of Virginia retained the right to terminate the concession after 40 years if it paid off Transurban's debts for the project and compensated Transurban for lost return on equity.485

While this project was a success in terms of successful completion, it serves as an example of the risk encountered by projects that issue bonds backed by projected toll revenues that are not achievable.

c. Comprehensive Development Agreements

i. Texas SH-130, TTC 335,486 North Tarrant Express

The Texas DOT SH-130 project is a 92-mi toll highway, the largest element of the \$3.6-billion Central Texas Turnpike System. Segment 1-4 of SH-130 was developed through an exclusive development agreement. Segments 5-6 were developed under a compre-

hensive development agreement (CDA). The CDA provides for design and construction to be conducted by the private consortium and gives Texas DOT the option for requiring the design-builder to provide maintenance, while Texas DOT is responsible for operating the toll facility. The initial phase of SH-130 opened nearly 1 year ahead of schedule and more than \$400 million under budget.

The Trans Texas Corridor initiative was envisioned as a massive 4,000-mi multimodal super corridor that would contain toll roads and commuter rail in 1,200 ft corridors. Texas DOT expected the project to take place over 50 years, and costs were estimated to be \$200 billion, to be funded with PPPs and tolling. The first segment of the massive project was the construction of TTC-35. Texas DOT has signed a CDA with Cintra-Zachary whereby Cintra-Zachary has agreed to develop the preliminary concept and financing plans for TTC-35 in exchange for \$3.5 million.

The project was subject to intense community opposition over tolling and the appropriation of 500,000 acres of private property. In 2004, the Trans Texas Corridor project was scaled back. In 2009, Governor Perry stated that "the name Trans Texas Corridor is over with." The Texas legislature approved a measure to expunge the references to the Trans Texas Corridor from state statutes, which was signed into law by Governor Perry on June 17, 2011.

6. State PPP Authority

a. Virginia

One of the first laws to enable the use of PPP in transportation was the Virginia PPTA of 1995. The Act, modified in 2005, allows PPPs for solicited and unsolicited proposals and contains guidelines to assist the Virginia DOT and other Virginia public entities in pursuing PPP agreements. The PPTA serves as an excellent model for state legislative initiatives.

The statute authorizes private entities to develop or operate qualifying projects promoting timelier or less costly completion while serving the public safety and welfare. The Act requires approval by a responsible public entity, and provides that the public entity may request proposals or invite bids. The statute establishes detailed guidelines for responsible public entities' action and submission requirements. It specifies PPP evaluation criteria, and provides for notification of affected local jurisdictions. It contains details of the powers and duties of the private entity, provisions for a detailed comprehensive agreement, interim default provisions, and provisions related to remedies, use of public entities' condemnation powers, and use of federal, state, and local financing. In addition, it provides details of

⁴⁸³ Peter Samuel, *Pocahontas Parkway Revenues About Half Forecast*, TOLLROADS NEWS, Feb. 18, 2004, available at http://www.tollroadsnews.com/node/582, last accessed on Sept. 8, 2013.

⁴⁸⁴ Peter Samuel, *Transurban has \$522m Agreement to Take Over Pocahontas Parkway VA*, TOLLROADS NEWS, May 2, 2006, available at http://www.tollroadsnews.com/node/1516, last accessed on Sept. 8, 2013.

 $^{^{485}}$ *Id*.

⁴⁸⁶ Fishman, supra note 425 at 14.

⁴⁸⁷ Paul West, *Perry's Road Dream a Public Relations Nightmare*, SCHENECTADY GAZETTE, Nov. 24, 2011.

competitive negotiation, posting of conceptual proposals and comment periods. $^{\rm 488}$

Under the statute, the public entity may grant or loan federal money and public funds and permit the use of TIFIA funds for PPP, and is not required to obtain legislative approval for individual PPPs. It permits all types of delivery systems, and exempts the PPP from the application of the state's general procurement laws. It permits the PPP to include local governments and regional authorities, and confers the power to develop and or operate qualifying transportation facilities. It also permits conversion of existing highways into toll roads. 489

b. Florida

Similarly, Florida PPP legislation allows Florida to receive or solicit PPP proposals, but these must have the concurrence of the Florida DOT and be consistent with the Florida Transportation Plan. Chapter 334.30 of Florida Statutes provides that there is a public need for the rapid construction of safe and efficient transportation facilities for the purpose of traveling and that it is in the public's interest to provide for the construction of additional safe, convenient, and economical facilities. The statute provides local resources to fund and finance the project. It requires that the project be owned by the department upon completion or termination of the agreement. It provides evaluation criteria, and limits PPP agreements to 50 years, but allows them to be up to 75 years as approved by the Secretary of Transportation. In addition, the Florida statute permits the use of state resources to finance and fund the PPP. The statute allows solicited and unsolicited proposals, and permits TIFIA loans but requires prior legislative project approval as evidenced by the approval of the project in the department's work program. It permits all kind of procurement including use of DB, long-term lease, and exemptions from general procurement laws. 490

c. California⁴⁹¹

California in 2009 passed a PPP statute that authorizes the use of PPPs for transportation projects by Caltrans and regional transportation agencies. The statute authorizes the contracting entity to impose tolls and user fees and authorizes solicited and unsolicited proposals. If unsolicited, proposals are subject to a competitive bid process if the public sponsor wishes to proceed. The statute authorizes an RFQ and RFP procurement selection process and provides an unlimited number of

projects. Selection is to be based on low bid or best value, and the statute sunsets and the PPP agreements must be signed by December 31, 2016.492

The statute established the California Transportation Commission to focus on PPP developments and education. The Commission must approve the project. To date, the Presidio Parkway PPP has been approved, in 2010, using TIFIA financing and availability payments.⁴⁹³

The validity of the California statute has survived judicial challenge in Professional Engineers in California Government et al. v. Department of Transportation. The plaintiff's professional engineers sought a permanent injunction to prohibit Caltrans from implementing the PPP for Phase II of the Presidio Parkway on the grounds that the project did not qualify as a PPP under the Streets and Highway Code. The Court of Appeals affirmed the lower court's denial of relief. The court rejected plaintiff's argument that although Caltrans was responsible for the performance of the work, it was not required to actually perform the engineering work, since the design was performed by a consultant. Also the court rejected plaintiff's argument that the statute required the project be funded by tolls and user fees, and concluded that the statute does not mandate but merely authorizes toll and user fees.

7. Common Legal Issues in PPP

State transportation officials should be aware of the following legal issues that merit analysis and attention in the PPP procurement process.⁴⁹⁴

a. Solicited and Unsolicited Proposals

A threshold issue that often arises involves what to do with unsolicited proposals. The USDOT Model Legislation provides for the receipt, evaluation, and acceptance of unsolicited proposals. If the unsolicited proposal meets the requirements, the public agency must advertise the proposal in general terms to solicit competing proposals for the same transportation facility, at which time the public agency may select the initial proposal or a competing proposal based upon its evaluation criteria. The Model Legislation provides that the agency may charge a reasonable fee to cover the costs of reviewing the unsolicited proposal. The Virginia PPTA serves as an excellent model and contains detailed guidelines and procedure on treatment of unsolicited proposals. Virginia has developed a QC process in which unsolicited proposals are analyzed to determine

⁴⁸⁸ VA. CODE § 56.575.

⁴⁸⁹ For a detailed discussion of suggested P3 legislation see FHWA Office of Innovative Program Delivery, http://www.fhwa.dot.gov/ipd/p3/state_legislation/.

 $^{^{490}\,}$ Fla. STAT. Ann. §§ 334.30, 337.251,338,165; 338.22–338.251, 339.55, and 348.0004; see FHWA project delivery Web site, n.455 supra.

⁴⁹¹ Smith, supra note 449.

⁴⁹² CAL. STS. & HIGH. CODE § 143 (SBX2 4).

⁴⁹³ Nancy Smith, Public Private Partnerships, presentation, NCPPP Conference, Sacramento, California, Jan. 20, 2011.

⁴⁹⁴ More detailed discussions of these issues are contained in BUXBAUM & ORTIZ, *supra* note 428, and NCHRP Legal Research Digest 51, Transportation Research Board, 2012.

if the project is in the public interest, and to then make a decision on whether the project should be pursued.⁴⁹⁵

b. Confidentiality vs. Transparency

PPP critics have often voiced concern over lack of transparency in the PPP process. PPP agreements are complicated, and are sometimes criticized for lack of transparency. The PPP selection process must be both transparent and confidential, which are important factors for the success of the PPP procurement. Any perceived unfairness and uncertainty in the procurement process will undermine public support for the PPP project, and may lead to litigation. The Virginia DOT has developed a process to review PPP submissions that incorporates public participation. In Virginia, PPPs are reviewed by an independent review panel comprised of various stakeholder groups. Evaluation criteria should be detailed in the enabling legislation and in the RFP and RFQ procurement process.

Protecting confidential information and trade secrets is also a concern. Protecting financial statements, trade secrets, and other commercially sensitive financial information from disclosure is an important issue. Considering a PPP proposal and subsequent negotiations often require revelation of information about corporate finances, strategic business plans, and unique design and technologies. Similar concerns exist under state open records laws. One of the nine exemptions under the Freedom of Information Act (FOIA) covers trade secrets and commercial or financial information, which are privileged and confidential. Under the USDOT Model Legislation, the private bidder designates as confidential or proprietary under the applicable open records law and, to the extent the agency agrees, it will take appropriate action to protect confidentiality. Virginia, Oregon, and Florida have taken specific legislative steps to protect PPP records from public disclosure.496 Due to the numerous parties involved in these complex negotiations, all should be aware of the requirements of federal and state open record laws.

c. State Approval

Some jurisdictions require that the state legislature or some other public entity review and approve proposed PPP agreements after they have been negotiated and finalized by the various entities. The California statute requires approval by the California Transportation Commission. Such legislative veto powers create uncertainty in the process and discourage PPP development when entities have to incur substantial development costs.

d. Bonding

Performance bonding is an important element in a PPP since it provides the transportation agency with some assurance that a project will be completed if the concessionaire has difficulty. The size of the contracts may preclude or limit small contractor participation. Exorbitant bond premiums can limit bidder participation since only a few companies are able to obtain bonds. Billion-dollar PPP projects are unable to get 100 percent performance bonds. Such bonding, even if available, is very expensive and tends to reduce competition and limit the number of proposers. Accordingly, some public owners have reduced the bonding limit to 50 percent. Less costly letters of credit and other forms of security should be considered in addition to legislative changes to enhance PPP development. The Texas DOT has adopted letters of credit on some of its most recent PPP projects. It should be noted that use of letters of credit may provide the owner with performance protection but do little to protect unpaid subcontractors and suppliers who cannot make demands on the letter of credit.497 The provisions of the Alaska Way Viaduct DB agreement require Performance and Payment bonds in the amount of \$500 million. 498 Changes to state legislation should be considered. By way of example, Missouri passed revisions to its performance bond requirements in order to use design-build-finance-maintain (DBFM) contracts to repair and replace 800 of the state's worst bridges. 499 States need to review their performance and payment bond statutes to determine whether they allow sufficient flexibility so that the private sector can respond if the bonds are not available in the marketplace.500

One owner's use of letters of credit, instead of the traditional performance bond, has led to litigation in Ohio. The Ohio State University conducted a pilot program for a construction manager at-risk contract for a medical center expansion. In order to save \$12 million in surety bond costs, it required the construction manager to furnish a \$20-million irrevocable letter of credit. Several subcontractors' associations and national trade associations commenced suit, seeking to compel the university to require traditional bonding. The Ohio Supreme Court ruled that the surety association had standing to sue, but was not entitled to compel the owner to obtain a surety bond, and that the bond requirement was not applicable under the specific provision of Ohio bidding law. ⁵⁰¹

e. Risk Allocation

⁴⁹⁵ BUXBAUM & ORTIZ, supra note 428, at 15.

⁴⁹⁶ USDOT, *supra* note 456, at 182.

 $^{^{497}}$ Interview with Nancy Smith of Nossaman Guthner Knox Elliott LLP, Oct. 6, 2011.

⁴⁹⁸ State of Washington DOT, SR 099 Bored Tunnel Alternative Design Build Project, § 13.3.

⁴⁹⁹ Fishman, *supra* note 425, at 36.

⁵⁰⁰ BUXBAUM & ORTIZ, *supra* note 428, at 23.

⁵⁰¹ Anna H. Oshiro & Michael S. Zicherman, Subcontractor Default Insurance May be Used In Place of Surety Bond, 31 CONSTRUCTION LAWYER 43, Hard Hat Case Notes (Fall 2011).

Risk allocation is well understood in the traditional procurement. In PPPs, close attention should be paid to risk assignment or transfer. In a traditional public sector design-bid-built project, the public sector makes all the decisions regarding production, financing, operation, and maintenance of the facility. As a result, very little opportunity exists for the private sector to assume project risk. In a PPP, the private sector has greater control over design, construction, operation, and maintenance of the facility and so is able to absorb risk. Some identified risks include: site risks, site preparation (environmental and archeological) risks, land use risks, technical risks, cost overruns, delays in completion, failure to meet performance criteria, and operating cost overruns. Additional potential risks include those involving delays and interruptions in operations, shortfalls in service quality, project acceptance risks, and risks arising from control of assets, political instability, demand/volume, construction costs, right-of-way costs, costs, transactional maintenance costs, rency/exchange, economic shifts, life-cycle costs, and changes of law.502

In a PPP, risk should be allocated to the party that can best manage it. Proper allocation of risk will result in lower overall risk for the entire project.

Some of the risks considered to be best handled by the public sector include environmental, right-of-way acquisition, statutory, regulatory, and public acceptance ones.⁵⁰³ Risks of changes in applicable public law that could have deleterious effects on the private partner's revenues are also often allocated to the public sector partner.

Risks typically transferred to the private sector partner include construction/schedule risks and traffic/revenue risks. It is also common to allocate construction, financial, traffic, revenue, and various other risks to the private sector because they are often in a better position to manage such risks. To the extent that the private entity agrees to finance the construction, or agrees to operate and maintain the facility, his risks include financing risk, traffic risk, and revenue risks.

The parties often share environmental and force majeure risks that are outside the control of either party. The parties also share the opportunity for excess revenue upon the return of total investment.⁵⁰⁴

State DOTs should note that PPPs for major projects are not based on simple, standard form contracts incorporating "boilerplate" language. Instead, they generally require lengthy, complex, project-specific agreements. The drafting and negotiation of such contracts requires specialized legal expertise, cannot be handled by agency non-attorney contracts or administrative staff, and may place heavy demands on agency lawyers put in the position of negotiating with private sector lawyers for commercial toll road operators who have acquired special-

ized expertise in how to maximize profits while minimizing risks. This may prove especially problematic in states where DOTs do not have their own full-time inhouse counsel specializing in transportation issues, but instead depend upon a State Attorney General's Office to provide generalized legal advice and assistance on an as-needed basis.

f. Tort Liability

The potential for unlimited tort liability in the absence of sovereign immunity and other protections available to public agencies is a serious issue and concern to private entities. The Congressional Budget Office noted in 1997 that potential tort liability poses a significant risk to private investors in road projects. 505 Accidents involving deaths, injuries, and environmental damage may result in financial loss to private partners. The public partner may be subject to claims for damages related to design flaws and operation problems. Public partners are often, but not always, protected by sovereign immunity or liability caps imposed by state tort claim statutes. 506 Some private partners mitigate these risks by turning over the operation and ownership to the state once the project is completed, while others rely on insurance coverage, which can be expen- $\rm sive.^{507}$

Some states have attempted to get the private sector to assume third-party tort liability as part of a PPP agreement road project. However, transferring the risk of tort liability to the private sector may increase the overall risk of the PPP, and may increase its cost and result in a less than optimal deal for the taxpayers. ⁵⁰⁸

In Missouri, the legislation for the Mississippi River Bridge PPP project limited tort claims to the sovereign immunity tort caps of the state.⁵⁰⁹ Another solution is to avoid the problem by transferring the operation and maintenance of a facility back to the public authority after construction.⁵¹⁰

g. Noncompete Clauses—SR-91, California

Noncompete clauses provide for protection of future revenue streams when tolls are the finance mechanism. Noncompete clauses limit the public entity's ability to make construction improvements to nearby facilities so as not to erode the demand for the PPP facility.⁵¹¹ The

⁵⁰² BUXBAUM & ORTIZ, *supra* note 428, at 16–17; and USDOT Report to Congress, *supra* note 460, at 60–61.

⁵⁰³ BUXBAUM & ORTIZ, supra note 428, at 18.

⁵⁰⁴ FISHMAN, *supra* note 428, at 33.

⁵⁰⁵ USDOT Report to Congress, *supra* note 459, at 88.

⁵⁰⁶ Notably, while New York State has waived sovereign immunity and allows highway tort claims to be adjudicated by its Court of Claims, it has not imposed any cap upon liability and is exposed to unlimited liability in such cases. Damages awards in individual New York State Court of Claims highway tort claims cases have occasionally exceeded \$40 million.

 $^{^{507}}$ *Id.* at 89.

 $^{^{508}}$ *Id*. at 62.

 $^{^{509}}$ FISHMAN, supra note 426, at 33.

 $^{^{510}}$ Id.

⁵¹¹ BUXBAUM & ORTIZ, supra note 428, at 32.

classic example most cited is SR-91 in California, wherein the PPP agreement provided that Caltrans agreed not to make improvements within a 1.5 mi "protection zone" of the HOT lanes on SR-91 without consulting the private operator. Later, for safety reasons, Caltrans merged the lanes over the objections of the operator, which led to litigation over the noncompete clause. In 2003 the toll lanes were purchased by Orange County Transportation Authority and the noncompete provision was eliminated.⁵¹²

h. Labor Issues

Labor issues are often topics in PPP agreements. In brownfield projects, labor issues range from displacement of existing workers to concerns about wages, health insurance, and pension and other benefits.

In greenfield projects, the concern relates to the private sector paying prevailing wages. To address such concerns, the Chicago Skyway PPP agreement provided for all contracts to contain prevailing wage language and required the concessionaire to retain all unionized employees.⁵¹³

i. Limits of Liability, Liability, and I/D

Agreements should contain and define liability, indemnification obligations, and insurance requirements for both the public and private entity, and prudent State DOT attorneys should pay close attention to such provisions. Typical agreements also provide for limits of liability to exclude liability for indirect, consequential, or incidental damages whether arising in contract, tort (including negligence), or other legal theory.⁵¹⁴

These issues are, for example, addressed in the Chicago Skyway agreement. The FHWA Web site describes some of the provisions that are being used.⁵¹⁵

The Dulles Corridor Metrorail Project agreement limits liability to \$500 million from all causes and damages, which include liquidated damages. However the contract excludes from the cap liability for intentional fraud, misconduct, or criminal acts as determined in a court of law. ⁵¹⁶ The Dulles Metrorail agreement also contains detailed procedure and indemnification provisions for negligence, recklessness, and willful misconduct; infringement of patented or copyrighted materials; fraud; or intentional misrepresentation, etc. ⁵¹⁷ State DOT attorneys may well wish to include consideration of such provisions in PPP agreements.

The PPP for the North Tarrant Express Project in Texas, by contrast, does not include any cap on liability.

The DB agreement for the Alaska Way Viaduct provides for a cap on liability of \$5,000,000 with respect to breach of the design-builder's obligation to complete the project and perform warranty work: \$500,000.00 with respect to the design-builder's obligation to make payments to all laborers, mechanics, subcontractors, and suppliers; and \$100,000.000 with respect to any other cause. In general terms, the cap excludes liability for damage or loss to the extent it is covered by insurance, or any liability for damages arising from fraud, willful misconduct by a DB-related entity, and/or criminal acts by the design-builder.

j. Termination Clauses

Typical termination provisions provide for termination for default and termination for convenience, and contain detailed notice requirements.

PPPs should have clear provisions addressing terminations and hand-back provisions that define the role of all parties to the agreement, as well as protect the public interest. Termination provisions specify how the PPP contractor will be compensated for completed work depending on the reasons for termination. ⁵¹⁸

The PPP agreement should address what happens at the end of the term or upon material default by one of the parties.

With respect to a material default, the public sector needs to ensure it can take prompt and adequate steps to keep the highway facility available and in proper condition for the traveling public in event of material breach or default, ⁵¹⁹ while the private entity needs to ensure it has a reasonable opportunity to cure any breach or default. Consideration should be given to providing a dispute avoidance mechanism such as dispute resolution boards in the basic contract to minimize the difficulties that might arise in such potentially contentious situations.

k. Maintenance Standards

Maintenance standards are often incorporated into PPP agreements. The goal of the public sector is to ensure that the leased facility meets or exceeds its maintenance standards. The Chicago Skyway contains 300 pages of detailed extensive terms and maintenance compliance requirements developed by the City of Chicago. ⁵²⁰ In addition to such standards, State DOT attorneys should consider inclusion in PPP agreements of provisions for monitoring, enforcing, and funding future maintenance obligations.

l. Perception of Foreign Control of Local Contractor

⁵¹² Id. at 32.

⁵¹³ *Id*. at 36.

⁵¹⁴ Amended and Restated Comprehensive Agreement Relating to Route 495 HOT Lanes, Dec. 19, 2007, Virginia Department of Transportation and Capital Beltway LLC, at 122.

⁵¹⁵ *Id*. at 38.

⁵¹⁶ Design Build Contract, Dulles Metrorail Project, Metropolitan Washington Airport Authority and Dulles Transit Partners LLC, May 31, 2007, at 100–103.

⁵¹⁷ Id. at 80-83.

 $^{^{518}}$ BUXBAUM & ORTIZ, supra note 428, at 37–38.

⁵¹⁹ FISHMAN, supra note 425, at 37.

 $^{^{520}}$ *Id*. at 10.

Perceptions of foreign control of public assets may lead to national security issues. Many foreign companies have past experience with operating toll roads throughout the world, and they have a strong presence in many PPP agreements, which include the Chicago Skyway, Indiana Toll Road, Trans Texas Corridor, and Pocahontas Parkway in Virginia. As the nation focuses on national security issues, these perceptions of foreign control should be examined to avoid potential problems in the PPP procurement process, particularly where PPP project agreements include long-term leases turning virtually all control over critical state transportation facilities to foreign corporate entities.

m. Use of Proceeds

How the proceeds from a PPP are used is subject to much debate, ranging from use of funds dedicated to future transportation projects, to retiring existing transportation debt (Indiana Toll Road), to addressing general government shortfalls and other government functions (Chicago Skyway).

n. Hand-Back Provisions

At the end of the term the facility, along with the right to collect tolls, reverts back to the public entity. It is the public interest that the facility is in good condition, requiring no more than minimal public investment. The PPP should provide terms and specify the condition for the return, and may include penalties for not meeting these requirements.⁵²¹ The detailed handback requirements for the Port of Miami Tunnel Project require the concessionaire, at the expiration of the term, to transfer the project to FDOT. The agreement provides for FDOT inspection of the project and requires the concessionaire to diligently perform and complete "renewal work" prior to turn over to FDOT. The agreement establishes a hand-back requirements reserve account or letter of credit, which are anticipated to be used to fund the renewal work required to meet the hand-back requirements.⁵²²

o. Environmental Liability, Including Preexisting Conditions

Generally in PPP agreements the owner remains responsible for preexisting environmental hazards. The owner becomes the "generator" and has the liability for future hazards. Generally liability for risk of known conditions is given to the private party, while unforeseen and unknown conditions are eligible for some level of compensation, which may involve the concessionaire retaining an initial amount.⁵²³ However the cost of

remediation performed by the concessionaire is generally the concessionaire's responsibility and not the owner's. 524 The DB agreement for the Alaska Way Viaduct provides for the owner, the Washington State DOT, to indemnify, protect, and defend the DB-related entities from all third-party claims from the presence of any hazardous materials within the project right-of-way, except for the hazardous material the design builder is responsible for as described in other sections of the agreement. The design-builder shall not be required to execute any hazardous waste manifest as a "generator." 525

p. Specific Performance as a Remedy

Specific performance is an equitable remedy that could be adopted, but research into specific performance as a remedy for default has shown neither reported cases nor any contract provisions in PPP agreements that refer to this issue.

d. Construction Manager at Risk and CM/GC

The Construction Manager at Risk (CMR) method of construction, also known by FHWA and some states as CM/GC or Construction Manager as Contractor (CMC), is a method of construction procurement and management that seeks to use a team approach among owners, designers, and contractors to optimize the balance between the various objectives of transportation construction projects during planning, design, and construction. This method can be used by public agencies that have statutory authority to contract with a general contractor who then not only acts as the prime contractor but also manages the construction project on behalf of the agency. This type of contract generally includes

⁵²¹ BUXBAUM & ORTIZ, *supra* note 428, at 34.

 $^{^{522}}$ Port of Miami Tunnel and Access Improvement Project, \S 6.9-6.10.

⁵²³ Telephone conversation with Patrick Harder, Nossaman Guthner Knox Elliott LLP, Dec. 19, 2011.

 $^{^{524}}$ Interview with Nancy Smith, Nossaman Guthner Knox Elliott LLP, Oct. 6, 2011.

⁵²⁵ State of Washington DOT, SR 099 Bored Tunnel Alternative Design Build Project § 18.2.

DOUGLAS D. GRANSBERG & JENNIFER S. SHANE, CONSTRUCTION MANAGER-AT-RISK PROJECT DELIVERY FOR HIGHWAY PROGRAMS, A SYNTHESIS OF HIGHWAY PRACTICE 5 (NCHRP Synthesis 402, Transportation Research Board, 2010); available at

http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_402.pdf, last accessed on Oct. 12, 2011; hereinafter cited as "NCHRP Synthesis 402." This synthesis provides a detailed review of the reasons, procedures, selection methods, preconstruction services, guaranteed maximum prices, quality management procedures, and barriers to implementation associated with CMR, and is a valuable resource for any state DOT evaluating the possibility of trying CMR as a project delivery method. Please note also that NCHRP has undertaken a project, NCHRP 10-85, to develop a Guidebook for Construction Manager-at-Risk Contracting for Highway Projects, initiated in 2011 and scheduled to be completed in 2013, which may provide significant additional information about CMR for state DOTs; see http://144.171.11.40/cmsfeed/TRBNetProjectDisplay.asp? ProjectID=2963, last accessed on Sept. 8, 2013.

 $^{^{527}}$ See, e.g., UTAH STAT. § 63-56-36(2) (2002).

either a fixed price for the construction or a guaranteed maximum price (GMP). In order to contract in this manner, an agency needs express statutory authority to deviate from competitive bidding rules. Such a statute generally authorizes the agency to solicit proposals and select the best proposal, similar to the manner in which it contracts with architects and engineers.

CMR uses somewhat different procurement, design, and construction procedures than the other main methods of construction: DBB, the traditional method required by law in many states and used by the majority of state DOTs, and DB, an innovative method that handles design and construction through a consolidated procurement process and places design and construction under the control of a single firm. CMR appears to offer state DOTs a potentially beneficial choice compared with the existing DBB method or the newer DB method. To explain why, it is necessary to consider some of the principal goals, tradeoffs, and risks involved in transportation construction projects, and the different ways in which the DBB, DB, and CMR methods address these goals, tradeoffs, and risks.

All transportation construction projects have goals involving the speed, quality, and cost of construction. 528 Building projects quickly minimizes the duration of traffic delays and other construction inconveniences to the traveling public and delivers transportation benefits sooner. Building projects to high standards of quality helps to assure the long-term safety, reliability and maintainability of the completed facility or structure. Controlling construction costs helps to keep projects affordable, a particularly significant factor when an agency's fiscal resources are limited.

These three basic goals conflict with each other. As one timeworn aphorism among design engineers has it: "fast, good, cheap—pick any two." Owners and designers face difficult tradeoffs. Emphasizing speed of construction may force a choice between obtaining good quality but incurring high costs, or controlling costs but sacrificing quality. Emphasizing quality may force a choice between building quickly but incurring high costs, or controlling costs but building slowly. Emphasizing cost control may force a choice between building quickly but sacrificing quality, or building well but slowly.

DBB, the traditional method of highway construction used by most state DOTs, seeks to assure quality by having design decisions made by in-house design engineers or highly qualified design consultants, independent of the profit motivations of construction contractors, and to control costs through competitive bidding of the construction work after the design is completed.⁵²⁹

While supported by clear statutory authority in most states, familiar, and time-honored, this method of construction has a variety of drawbacks. By requiring that the project design be fully completed before the construction work can be bid and the construction work begun, DBB prevents state DOTs from delivering projects more quickly through overlapping the design and construction processes. By maintaining separation between the design engineers and the design process on the one hand and construction contractors and the construction process on the other, DBB may prevent design decisions from giving adequate consideration to factors such as constructability.⁵³⁰ Design engineers, without access to the practical expertise of construction contractors, sometimes produce designs that are more difficult, expensive, or slow for contractors to build than alternative and equally valid methods which contractors might be aware of. DBB may produce the lowest apparent initial prices through competitive bidding, but this method may give contractors no incentives to keep construction costs under control, and in fact may encourage contractors to maximize profits by seeking change orders (design changes through contract amendments) that will increase their compensation after the initial contract award.531 By making contractor selection dependent upon the lowest bid, DBB may also tend to award contracts to contractors who aim to meet the minimum contractually required standards, rather than contractors who may do better quality work at the cost of somewhat higher prices.

DB, a widely considered alternative method, seeks to accelerate project completion and control project costs by combining the procurement of design and construction services into a single contract under the control of a single firm. The perceived advantages of the DB method are that it streamlines procurement, allows joint management of and close coordination between designers and builders, speeds project completion through coordinated overlapping of design and construction, and helps to control costs. DB may also involve a variety of disadvantages, however, which are not as widely recognized. DB may require the owner to surrender design control over the project to the DB contractor.532 DB may also subject decisions by design engineers to financial pressures, although it does not relieve design engineers from exposure to potential legal liability for design decisions. As a result, DB may have the potential to favor speed of project completion, and

 $^{^{528}}$ Gransberg & Shane, supra note 526, at 13, fig. 5, citing D.D. Gransberg, J.E. Koch & K.R. Molenaar, Preparing for Design-Build Projects: A Primer for Owners, Engineers and Contractors (ASCE Press, 2006).

⁵²⁹ While FHWA does not currently have regulations on CMR, FHWA does require that state DOTs obtain Special Experimental Projects Number 14—Innovative Contracting approval in order to obtain federal-aid funding for projects or

programs using CMR; see FHWA Construction Program Guide Web page on Construction Manager/General Contractor Project Delivery,

http://www.fhwa.dot.gov/construction/cqit/cm.cfm,

last accessed on Sept. 8, 2013, which includes a link to information on the SEP-14 approval process. See~also Gransberg & Shane, supra note 526, at 7.

 $^{^{530}}$ Gransberg & Shane, supra note 526, at 7.

 $^{^{531}}$ *Id* .

⁵³² *Id*. at 5, 8–9.

control over project costs, over design considerations and construction quality.

1. The Goals of CMR and GC/CM

The CMR method, also known as the General Contractor/Construction Manager (GC/CM) method, while requiring FHWA approval for use on federal-aid transportation projects, ⁵³³ seeks to provide the advantages and avoid the disadvantages of DBB and DB through a team approach. The goals and advantages of CMR include the following:

Owner Retention of Design Control—As discussed below, while CMR takes advantage of construction contractors' expertise, it leaves control over design decisions in the hands of the owner and the owner's inhouse or consultant design engineers. Design decisions are made for engineering reasons, and not because a construction manager pressured engineers to compromise their judgment and design quality in order to increase the contractor's profits.

Qualification-Based Selection—CMR allows the owner to select the designer and contractor on the basis of qualifications rather than lowest price, while still controlling costs by making use of competitive bidding for selection of trade subcontractors.⁵³⁵

Teamwork—CMR seeks to promote teamwork on projects by aligning the interests and goals of the owner, engineering design consultant, and construction contractor to the greatest extent possible, from early in the project through to project completion.⁵³⁶

Constructability—CMR enhances project constructability by selecting and retaining a construction contractor early in the project, to provide design engineers with input based on construction expertise from early in the design process, well prior to construction, when design adjustments are quicker, easier, and less expensive to make. 537 This is preferable to waiting until after the project design has been completed to conduct a constructability review, and then offering recommendations requiring extensive, time-consuming, and expensive revisions to project plans. The purpose is to improve the quality of project design, and reduce owners' costs, while also improving contractors' profitability. Through a preconstruction services contract, the owner and designer can also obtain the construction contractor's assistance with scheduling, cost estimating, value analysis, and communications with project stake-

Control of Risks—CMR focuses on identifying and addressing the foreseeable risks of large, complex, and expensive projects; doing so early enough to allow such risks to be controlled through cost-effective methods;

and improving predictability by allocating among the parties those risks which cannot be fully avoided. In particular, once design has advanced far enough, the contractor provides the owner with a GMP for construction, including contingencies. 539

Faster Project Delivery—CMR accelerates project delivery by making it possible to overlap design and construction in a planned and controlled manner, initiating construction of early stages of the project as soon as designs for those stages are complete, and allowing the contractor to lock in favorable prices for materials and equipment as early as possible, even while work on design of later stages of the project continues. ⁵⁴⁰ As an added benefit, this allows risks to be managed one stage at a time, rather than presenting all parties with the full range of risk from the outset of the project.

Minimization of Disputes—By affording the construction contractor input to the design process from early in the project, CMR allows the contractor to flag potential problems for avoidance or resolution early on, and encourages the contractor to consider the resulting project design a joint effort.⁵⁴¹ CMR also seeks to manage ongoing risks through a collaborative process, rather than pitting the owner and designers against the contractor in an adversarial process. The purpose is not only to anticipate and avoid problems at the design stage, but also to promote teamwork in solving problems encountered in the field in order to reduce disruption, delay, and cost increases during construction.⁵⁴²

2. Advantages of CMR Over Design-Build

For owners, CMR offers significant potential advantages over DB.543 Perhaps the most important of these is that under CMR, the owner retains control over the detailed design of the project, while still achieving cost savings, rather than surrendering control over the design to the design-builder as required under DB.544 Typically, the owner has separate contracts with a design firm and the contractor, and the contracts require them to consult and cooperate with each other regarding constructability and comparable issues.⁵⁴⁵ Like DB, CMR provides the owner with an opportunity to accelerate project delivery through overlapping the design and construction stages of the project.⁵⁴⁶ Another advantage for owners is that participation in the design of the project through a CMR preconstruction services agreement encourages the contractor to have a sense of ownership of the resulting design, which may help to minimize disputes between the contractor and the

 $^{^{533}}$ *Id.* at 1.

⁵³⁴ *Id*. at 1, 9, 12, 13.

⁵³⁵ *Id.* at 1, 34–50.

 $^{^{536}}$ *Id.* at 14–15.

⁵³⁷ Id. at 2, 13-14.

⁵³⁸ Id. at 26, 51-64.

⁵³⁹ *Id.* at 1, 5, 12, 65–76.

⁵⁴⁰ Id. at 3, 12, 15, 24.

 $^{^{541}}$ *Id.* at 16.

 $^{^{542}}$ *Id*. at 5.

 $^{^{543}}$ *Id*.at 11.

⁵⁴⁴ *Id.* at 5, 9, 12, 13.

⁵⁴⁵ *Id*. at 7, 15.

⁵⁴⁶ *Id*. at 12, 15.

owner and designer during construction, and make any disputes that do occur easier to resolve.⁵⁴⁷ It is possible that owners may find sufficient flexibility under state statutes to implement CMR in states whose statutes do not authorize the use of DB.548 It also appears possible that consultant engineering design firms may prefer working under CMR to DB, due to their ability to preserve the independence of their professional judgment under CMR rather than being subjected to direct control by contractors' project managers who may not be engineers under DB. For all of the parties involved, owners, designers, and contractors, CMR appears to represent a more incremental change and less of a radical shift from the traditional DBB approach than DB does.⁵⁴⁹ This may make it somewhat easier for owners to transition from the traditional DBB approach.

3. State Experience with CMR Procedures

There is considerable variation between states in whether existing statutory authority for transportation construction projects authorizes state DOTs to use CMR as a construction method, and state DOTs considering the possible use of CMR would be well advised to research the scope of their existing statutory authority before undertaking CMR projects. State DOTs having experience with complex and sophisticated construction projects, and having adequate resources, may wish to consider CMR, particularly for large, complex, highrisk, and time-sensitive projects that require complex phasing, and on which value engineering may result in significant cost reductions. ⁵⁵¹

Utah DOT appears to have more experience with use of CMR than most other state DOTs. Utah has a statute authorizing CM/GC projects, and has adopted regulations governing contracting for CM/GC projects. Ltah's statute requires that those rules must require competitive selection of the GC/CM, and also that where an additional subcontractor is procured by the GC/CM, it must be publicly bid in the same manner as if the agency were managing the construction. Ltah DOT has a CM/GC Web page, has posted sample CM/GC documents on line, and has also posted annual CM/GC reports for 2007 through 2009.

Several other states have at least some experience with CMR. Florida DOT has a CMR Web page, and has posted sample CMR documents online. 555 Oregon DOT performs CMR projects under a state statute authorizing exemptions from competitive bidding requirements under specified circumstances, and a specific exemption issued under that statute for CMR projects. 556 Oregon DOT has constructed a bridge on an Interstate highway using the CM/GC method, and has a Web page for the project on which it has posted various documents used in the RFP process used to select the CM/GC firm for that project.⁵⁵⁷ Arizona has enacted a statute governing CMR contracting.⁵⁵⁸ In Arizona, the City of Glendale has posted online copies of sample contracts for CMR design-phase services and construction-phase services.559 Other state DOTs, including Michigan and Rhode Island, have some experience with CMR involving aviation or port facilities rather than highway projects. Alaska DOT reportedly also has some limited experience with CMR.

Two state DOTs, in Nevada and Washington State, have obtained statutory authority to use CMR⁵⁶⁰ and are reportedly considering the possibility of CMR pilot projects, but do not yet appear to have any experience

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http://www.udot.utah.gov/main/f?p=100:pg:0:::1:T,V:1871,; http://www.udot.utah.gov/main/uconowner.gf?n=113504002204 9311030; and http://www.fhwa.dot.gov/programadmin/ contracts/sep14_ut.cfm; last accessed on Sept. 8, 2013; as referenced by http://www.fhwa.dot.gov/construction/cqit/cm.cfm, last accessed on Sept. 8, 2013.

- $^{555}\,See$ http://www.dot.state.fl.us/construction /CONSTADM/CMatRisk/CMatRisk.shtm, last accessed on Sept. 8, 2013; as referenced by http://www.fhwa.dot.gov/construction/cqit/cm.cfm, last accessed Sept. 8, 2013.
- 556 See OR. REV. STAT. ORS279C.335, available at http://www.leg.state.or.us/ors/279c.html, last accessed on Sept. 8, 2013. Oregon DOT conducts CMR projects under Exemption No. 2007-51; see http://www.fhwa.dot.gov/construction/contracts/cmgc_statutes.cfm, last accessed on Sept. 8, 2013.
- ⁵⁵⁷ See http://www.oregon.gov/ODOT/HWY/MPB/WRB. shtml#CM_GC_Procurement_Documents, last accessed on Sept. 8, 2013; as referenced by http://www.fhwa.dot.gov/construction/cqit/cm.cfm, last accessed on Sept. 8, 2013.
- http://www.azleg.gov/FormatDocument.asp?inDoc=/ars/28/0736 6.htm&Title=28&DocType=ARS, last accessed on Sept. 8, 2013.
- ⁵⁵⁹ See http://www.glendaleaz.com/engineering/documents/ SampleCMARDesignPhaseServicesContract.pdf, and http://www.glendaleaz.com/engineering/documents/SampleGM PContract.pdf, last accessed on Sept. 8, 2013; as referenced by http://www.fhwa.dot.gov/construction/cqit/cm.cfm, last accessed on Sept. 8, 2013.
- ⁵⁶⁰ The State of Washington statute is Revised Code of Washington (RCW) 39.10.340 through 39.10.410, available at http://apps.leg.wa.gov/rcw/default.aspx?cite=39.10, last accessed on Sept. 8, 2013.

⁵⁴⁷ Id. at 1, 2, 5, 16.

 $^{^{548}}$ *Id*. at 6.

⁵⁴⁹ *Id*. at 3.

 $^{^{550}}$ *Id*. at 27.

⁵⁵¹ Id. at 27-30.

⁵⁵² UTAH STAT. § 63-56-36(2) (2002); UTAH ADMIN. CODE RULE R916-4, Construction Manager/General Contractor Contracts, effective Sept. 1, 2011; available at http://www.rules.utah.gov/publicat/code/r916/r916-004.htm, last accessed on Sept. 8, 2013; as referenced by http://www.fhwa.dot.gov/construction/contracts/cmgc_statutes.cfm, last accessed on Sept. 8, 2013.

 $^{^{553}}$ UTAH STAT. § 63-56-36(2) (2002).

⁵⁵⁴ See http://www.udot.utah.gov/main/f?p=100

with CMR projects that have gone all the way from inception to completion. $^{561}\,$

The Washington State statute, originally enacted in 2002, authorizes agencies to use the GC/CM method when implementation of the project involves complex scheduling requirements; the project involves construction at an existing facility that must continue to operate during construction; or the involvement of the GC/CM during the design stage is critical to the success of the project. ⁵⁶² The statute defines a GC/CM as

a firm with which a public body has selected and negotiated a maximum allowable construction cost to be guaranteed by the firm, after competitive selection through formal advertisement and competitive bids, to provide services during the design phase that may include lifecycle cost design considerations, value engineering, scheduling, cost estimating, constructibility, alternative construction options for cost savings, and sequencing of work, and to act as the construction manager and general contractor during the construction phase. ⁵⁶³

Although the statute refers to "formal advertisement and competitive bids," it contemplates an RFP process rather than the traditional invitation for bids and submission of unit price bids. Proposers must compete on the relative superiority of their proposals based on the factors set out in the statute. Evaluation factors include, but are not limited to, the ability of professional personnel, past performance in negotiated and complex projects, and ability to meet time and budget requirements; the scope of work the GC/CM proposes to selfperform and its ability to perform it; location; recent, current, and projected workloads of the firm; and the concept of its proposal.⁵⁶⁴ Because the criteria to be evaluated are subjective, a committee process is used to evaluate the proposals. The committee selects the most qualified finalists, which then submit final proposals. The committee selects the firm submitting the highest scored final proposal using the evaluation factors and the relative weight of factors published in the RFP.⁵⁶⁵

Other state transportation agencies are using the CMR approach. For example, the Miami Intermodal Center comprises a multiyear program of ground access to and with Miami International Airport. It incorporates the construction of a new rental car facility comprising space for 10,000 cars, an automated airport people mover, and various roadway improvements to improve airport access. It is being financed by Miami-Dade Expressway Authority toll revenue, TIFIA loans, and federal grants. It is being constructed under the CMR delivery system. The CMR project delivery system provides the opportunity to begin construction, central-

ize risk and responsibility under one contract, and guarantee completion of the project at a GMP. 566

State DOTs considering whether to undertake projects on a CMR basis might wish to review the Utah, Florida, and Oregon DOT Web pages on CMR and CM/GC and the sample documents posted on them, and contact those DOTs or other states having CMR experience to benefit from the lessons they have learned through undertaking such projects.

NCHRP Synthesis 402 provides a more detailed examination of models for CMR delivery, which state DOTs considering use of the CMR method should review in considering what approach they might wish to take. ⁵⁶⁷

The Associated General Contractors of America (AGC), the national trade association of construction contractors, also offers a CMR Web page⁵⁶⁸, which includes a link allowing public owners to purchase the AGC's CM/GC Guidelines for Public Owners,⁵⁶⁹ a PowerPoint presentation that includes coverage of CMR,⁵⁷⁰ and a map providing information concerning which states currently authorize the use of CMR for horizontal (i.e., highway) construction.⁵⁷¹

4. CMR Selection Methods

Since an essential element of CMR is the identification, selection, and retention of a construction contractor to perform preconstruction services during the design phase of the project, the use of a "lowest responsible bidder" approach to the selection of the contractor is not suitable for selection of such a contractor. While open public competition through an RFP or comparable process is appropriate, selection of a CMR contractor needs to focus more on the contractor's past project experience, the qualifications of the contractor's personnel, and a demonstrated ability to perform construction projects in a manner reflecting timely, high-quality work delivered within fiscal constraints, rather than merely obtaining the lowest price. ⁵⁷² NCHRP Synthesis 402 examines CMR contractor selection methods,

last accessed on Sept. 8, 2013.

 $^{^{561}}$ Gransberg & Shane, $supra\,$ note 526, at 17–18; for further discussion of state DOT experience with CMR projects, $see\,$ pp. 18 to 26.

⁵⁶² Wash. Rev. Code § 39.10.340 (2013).

 $^{^{563}}$ Wash. Rev. Code $\$ 39.10.210 (2013).

⁵⁶⁴ Wash, Rev. Code § 39.10.360 (2013).

 $^{^{565}}$ Id.

 $^{^{566}\,}See$ FHWA project profile, http://www.fhwa.dot.gov/ipd/project_profiles/fl_95_express.htm.

 $^{^{567}}$ Gransberg & Shane, supra note 526, at 27–33.

 $^{^{568}}$ $See\,$ http://www.agc.org/cs/cm_atrisk, last accessed on Sept. 8, 2013; as referenced by http://www.fhwa.dot.gov/construction/cqit/cm.cfm,

⁵⁶⁹ http://store.agc.org/Construction-Delivery.

⁵⁷⁰ Michael J. Ladino, Esq., Kenneth A. Reedy, P.E., & John E, Carlson, DBIA, Alternate Project Delivery in Horizontal Construction:

http://www.agc.org/galleries/projectd/APDM%20in%20Horizont al%20Construction.pdf, last accessed on Sept. 8, 2013.

⁵⁷¹ See http://www.agc.org/cs/industry_topics/project_delivery/cmatrisk, last accessed on Sept. 8, 2013.

⁵⁷² Gransberg & Shane, supra note 526, at 7.

and state DOTs considering use of the CMR method would benefit from evaluation of its findings.⁵⁷³

5. CMR Preconstruction Services

Under the CMR method, in addition to assigning inhouse design staff or retaining a consulting engineering design firm, the owner typically enters into a preconstruction services agreement with the selected contractor prior to either the completion of design or the commencement of construction, which will be handled under a separate construction contract with the contractor. This allows the owner and the designer to involve the construction contractor during the design phase, take advantage of the contractor's field experience and expertise, and reduce overall design costs through cooperation and collaboration between the owner, designer, and contractor.⁵⁷⁴ One of the most important aspects of such collaboration involves drawing on the contractor's input to take considerations of constructability into account and incorporate such considerations into major design decisions as early as possible in the design of the project, avoiding or at least reducing the need to make major design changes later in the project when they would be more disruptive and expensive.575 NCHRP Synthesis 402 includes detailed discussion of CMR preconstruction services, which state DOTs considering use of the CMR method would benefit from reviewing.576

6. CMR Procedures for Setting Maximum Price

Another significant benefit of CMR for owners is that it allows them to protect against cost risks by getting the contractor to make a contractual commitment to a GMP for construction once the design of the project is sufficiently advanced.⁵⁷⁷ While this may sometimes be done on a one-time, lump sum basis for construction of the project as a whole, one of the advantages of CMR is that it affords both owners and contractors the flexibility to use progressive rather than lump sum procedures for setting GMP. Basically, the project can be broken into phases, with construction of early phases commenced as soon as designs are completed for those phases, in order to accelerate project completion by allowing construction to begin while work on designing the later phases of the project continues. The construction of each phase can be handled by a separate agreement, or by supplemental agreements to a master agreement, with the owner and contractor agreeing upon a GMP for each individual phase before construction of that phase begins. This allows both the owner and the contractor to use more current information, and affords greater flexibility in managing construction

costs as the project progresses, rather than being constrained by a single lump-sum figure determined before any construction has taken place. ⁵⁷⁸ An additional advantage of the progressive approach to setting GMPs for each phase of the project is that it allows the contractor to lock in current prices for construction materials and services, which can be a significant advantage during periods when prices and costs are rising. ⁵⁷⁹ NCHRP Synthesis 402 includes an examination of CMR procedures for setting GMPs, which state DOTs considering use of the CMR method should review. ⁵⁸⁰

7. CMR Quality Management Procedures

One of the objectives of CMR is to improve project design quality, and avoid or minimize later construction problems, through contractor involvement and collaboration with designers beginning relatively early in the design process. During the construction phase, QC can be handled, under the construction phase contract, in a manner familiar from the traditional DBB process, using DOT in-house or consultant inspectors to perform field inspections and quality assurance (QA) functions and documentation. See NCHRP Synthesis 402 includes an evaluation of CMR quality management procedures, which state DOTs contemplating use of the CMR method should consider.

8. Case Law

The CMR or GC/CM method of construction has been the subject of litigation in California, Oregon, and Indiana.

In City of Inglewood—Los Angeles Civic Center Authority v. Superior Court, the agency had entered into a contract that was similar to a GC/CM contract. In addition to requiring that the contractor coordinate the solicitation and acceptance of bids and supervise the construction, it also required the contractor to guarantee a maximum price for the entire project.⁵⁸⁴ The court held that the contract was not valid. By requiring that the contractor guarantee a maximum price, the agency went beyond the normal responsibilities of a professional such as an engineer or architect. The contract was more in the nature of a prime contract, which had to be competitively bid and could not be negotiated.

However, in cases in which the construction manager's role does not include guaranteeing a maximum price, these arrangements have generally been upheld as legitimate exceptions to the requirements of competi-

⁵⁷³ *Id*. at 34–50.

⁵⁷⁴ *Id.* at 2, 8, 12, 14, 26.

⁵⁷⁵ Id. at 15, 26.

 $^{^{576}}$ Gransberg & Shane, supra note 528, at 51–64.

⁵⁷⁷ *Id*. at 1.

⁵⁷⁸ Id. at 2, 10, 16, 24.

⁵⁷⁹ *Id*. at 3, 12.

⁵⁸⁰ Id. at 65–76.

 $^{^{581}\,}Id$ at 77–79.

 $^{^{582}}$ Id. at 79–80.

⁵⁸³ Id. at 77-81.

 $^{^{584}}$ City of Inglewood - Los Angeles Civic Center Authority v. Superior Court, 7 Cal. 3d 861, 103 Cal. Rptr. 689, 500 P.2d 601 (1980).

tive bidding without specific statutory authority. These arrangements are similar to the GC/CM contract, in that the rationale for the contract appears to be factors similar to those set out in the Washington State GC/CM statute. They are distinct from the GC/CM contract, however, in that the construction manager does not also act as a general contractor and they do not include a fixed price guaranteed by the construction manager.

For example, in *Mongiovi v. Doerner*, the contract was let to a construction manager in a project using a "fast track" method of construction contracting.⁵⁸⁵ There was to be no prime contractor; rather, the construction manager was to supervise the solicitation and acceptance of bids and then share supervisory authority over the construction with the architect. The construction manager did not perform any construction work nor did it supply materials. Because the contract involved only professional, personal services, it could be evaluated only by subjective criteria and was therefore held to be exempt from public bidding.

In another case, the hiring of a construction manager was found to be authorized by a school district's statutory authority to hire an architect or engineer to prepare plans, specifications, and estimates and to supervise construction.⁵⁸⁶ The district had no statutory authority to employ the GC/CM method, but rather contracted with a construction manager rather than a prime contractor. The construction manager then coordinated the solicitation and acceptance of bids for 27 different school addition projects. The construction manager shared general supervisory authority with the architect during construction. The unsuccessful bidder did not contend that the district could not hire architects and engineers to act as construction managers, but argued that the exception for architects and engineers did not allow the construction management contract to be let without bids. The court held that although the statute allowing the employment of architects and engineers was silent on construction managers, the district had general authority to hire "such other personnel or services, all as the governing board considers necessary for school purposes."587 The construction manager function was consistent with the authority to hire architects and engineers, and was authorized by this catch-all provision.

4. New Concepts

Other new concepts potentially affecting project delivery are on the horizon, including Integrated Project Delivery, Building Information Modeling, and Design Sequencing.

a. Best-Value Procurement

1. Definition and Process

Best-value procurement can be defined as a process where price and other key factors are considered for evaluation in the selection process, to minimize impacts and enhance the long-term performance and value of the construction. Best-value procurement may encompass many of the concepts from other current procurement methods, which include pre and post qualifications, A+ B bidding, and extended warranties. Best-value procurement is commonly used in DB procurement. The Army Source Selection Guide (Army 2001) defines best value as "the expected outcome of an acquisition that in the Government's estimation provides the greatest overall benefit in response to the requirements."

2. Best-Value Selection for Construction Projects

Shortcomings of the traditional low-bid system have led to increased focus on best-value procurement. The development of best-value procurement borrows ideas and approaches form the private sector. Private sector construction owners have often used best-value selection to obtain the best value for the dollars expended. Best-value selection in negotiated procurement is generally based on numerous factors, which include cost, schedule, quality, safety, and technical ability. Best-value procurement practices are increasingly being adopted by the public sector through legislation.

3. Best-Value Selection in Transportation Projects

FAR Part 15, contracting by negotiation, establishes the best-value source selection process for federal contracts. The process, known as "competitive negotiation," requires the source selection decision to be based on a determination that the selected proposer has offered the best value to the government. For many years, 23 U.S.C. § 112 (b) (3) has required low-bid procurement for most construction projects. With the implementation of the SEP-14 initiative, however, many projects authorized have used the best-value concepts and added to the public-sector body of knowledge. In 1998, Congress acknowledged the need for such alternate procurement and enacted revisions to 43 U.S.C. § 112(b)(3), allowing best-value procurement to be used for DB projects. The American Bar Association (ABA) has published Model Legislation for state and local legislatures to incorporate best-value concepts into the competitive bid process. The Model Code provides a prototype of legislation that allows best value to be considered in awarding construction projects. The ABA model is intended for DB projects, but does permit its use on other projects for which competitive sealed bidding is determined to be impractical and not advantageous to the owner. States that permit consideration of best value in construction procurement currently include Delaware, Colorado, and Kentucky. Legislation in various states is moving towards allowing the use of best-value selection. Many

⁵⁸⁵ Mongiovi v. Doerner, 24 Or. App. 639, 546 P.2d 1110 (1976)

 $^{^{586}}$ Attlin Constr., Inc. v. Muncie Community Schools, 413 N.E.2d 281, 287 (Ind. App. 1980).

⁵⁸⁷ *Id*. at 290.

states have passed best-value selection for DB selection. However, beyond DB, other best value statutes have been passed in Colorado, Delaware, and Kentucky. The Colorado and Kentucky laws do not appear to be applicable to DOT projects. The Delaware code allows bestvalue procurement for large public work projects, with best value determination based on objective criteria outlined in the invitation for bid. The Delaware statute assigns 70 to 90 percent weight to price and 10 to 30 percent to schedule in its evaluation. The agency must rank the bidders according to this criteria and award to the highest ranked bidder. Apart from DB selection, the best-value evaluation and selection process for construction projects has been a topic of several projects that have received SEP-14 approval. The Michigan DOT is using the best-value selection process for the M-39 (Southfield Freeway), wherein the contract will be awarded to the bidder who proposes the best value as determined by a formula that weighs technical score as 40 percent and price as 60 percent. In addition, bestvalue selection is being implemented for the City of Colorado Springs Woodman Road Widening Project.

4. Best-Value Bid Protests

In certain instances, best-value selections have led to bid protests. By way of example:

Butt Construction—A best value bid protest was commenced by Butt Construction Company, Inc. for renovation work at Wright-Patterson Air Force Base. Butt had submitted a lower cost proposal for the project than Monarch, the firm awarded the contract. The government determined that the proposal submitted by Monarch was technically superior, and that Monarch's experience was sufficient to justify the higher price. The Comptroller General rejected the protest, and noted that the source selection officials had broad discretion to determine the manner and extent of technical and price evaluation.

White Construction-A public owner's decision to award to a bidder other than the lowest bidder has also caused problems in Massachusetts. In September 2000, White Construction, the low bidder on one alternate bid, challenged the award to DeMatteo for renovation of the Tobin Memorial Bridge. Mass. Ann. Laws. ch. 30, § 39M (2000) requires award to the lowest bidder and eligible bidder on the basis of competitive bids publicly opened and read. The public agency in Massport provided for alternate bids and awarded the project to higher bidder DeMatteo, who was the low bidder on the silica fume concrete alternate. The Appeals court rejected the protest since White was not the low bidder on all alternates and the owner had the discretion toaward to DeMatteo, who was the lowest bidder on the silica fume concrete alternative. The case provides a clear example of giving the owner the discretion to determine that a higher cost alternative is more advantageous than the lowest-priced bid without having to justify its decision with a cost benefit analysis of the alternates.

Minnesota I-35-An important best value selection bid protest decision was handed down in the DB selection for the I-35 Bridge construction project in Minneapolis, Minnesota. In 2007, the Minnesota Legislature enacted DB best value for certain construction projects. On August 1, 2007, the Mississippi River Bridge collapsed, killing 13 people and injuring many others. In recognition of the critical nature for the acquisition of a permanent replacement, the Minnesota DOT conducted DB procurement. The Minnesota DOT utilized a twostep process (RFQ followed by RFP) for selection, adhering to the statutory framework. Flatiron-Manson J.V. (Flatiron) received the highest score, based upon the evaluation by the Minnesota DOT Technical Committee. Plaintiffs commenced a bid protest, which was denied by the agency decision, and the contract was later awarded to Flatiron. Litigation for injunctive relief was commenced on October 16, 2007, but the requested injunction was denied on October 31, 2007. Flatiron then proceeded with the construction of the new bridge. Plaintiffs appealed the order to the Court of Appeals on November 7, 2007, which was ultimately dismissed December 11, 2007. The litigation returned to the District level. On July 16, 2008, Plaintiffs filed a motion for a temporary injunction against seeking to enjoin the reconstruction of the I-35 Bridge by Flatiron, asserting that the Flatiron contract was illegal since it was not responsive to the RFP in that it proposed work outside the right-of-way and did not comply with the two websper-girder requirement. The District Court on August 26, 2008, recognized that the project had a substantial completion date of September 24, 2008, and was nearly complete. The District Court rejected appellants' argument that the winning bid was not responsive. The Court of Appeals affirmed the District Court decision, holding that the common law definition of "responsiveness" does not apply to DB best-value procurement process and that the Minnesota DOT Technical Committee acted within its discretion when it determined Flatiron was responsive. The court affirmed the bestvalue selection that was at greater cost based on the exercise of discretion by the construction agency.

b. Integrated Project Delivery (IPD)

1. Definition—Enhanced Collaboration.—Integrated Project Delivery (IPD) is a collaborative approach to project delivery. It is a major paradigm shift under which multiple parties, including the owner, designer, contractors, and major suppliers, enter into one contract. The principles behind this approach require the parties to provide inputs at all stages of construction, and to share the risks and rewards of their collaborative efforts. IPD is founded on principles of trust, mutual respect, and mutual benefit and reward. The principles of IPD include collaborative decision-making, early involvement of key project participants, early goal definition, and intensified planning. IPD principles

588 NATIONAL ASSOCIATION OF STATE FACILITIES ADMINISTRATORS (NASFA), CONSTRUCTION OWNERS

also include key participants bound together as equals, shared risk and reward based upon project outcome, liability waivers between key participants, fiscal transparency, intensified design, jointly developed project target criteria, collaborative decision-making and open communication.

IPD envisions a contractual model under which the owner, constructor, designer, and potentially others enter into a single multi-party contract. The multi-party agreement also provides for management of the project to be governed by a committee that strives for unanimous decision-making. The parties may adopt some of the IPD principles without formally adopting a multi-party contract. "Lean" construction principles, multi-party agreements, and building information modeling (BIM) are often incorporated into the IPD arrangement.

The "lean" construction movement is based on applying principles of lean manufacturing in the design, engineering, and construction of capital projects. "Lean" provides planning tools and mechanisms to maximize value and minimize waste throughout the life cycle of the project. Tools and techniques involve target value design, setting base design, and a detailed planning structure such as the "Last Planner System," which brings together design team leaders and trade foremen for frequent collaborative meetings wherein each group makes reliable promises regarding future work efforts. 589

The principles of the multi-party contract require full and open communication; an incentive compensation structure; active collaboration among the owner, constructor, and designer; and appropriate limitation of liability for the design and construction team. The IPD concept has been adopted in hospital construction and is being given active consideration and analysis by public owners such as Massachusetts DOT. IPD principles are also being given attention by the Division of Capital Asset Management of the Commonwealth of Massachusetts. 590

2. BIM.—Digital technology has changed many aspects of today's design and construction process. Digital drawing and models serve as shared resources for information about a facility, forming a reliable basis for decisions from inception through award and final construction. BIM software permits collaboration by various stakeholders at different phases of the life cycle of the facility to insert, extract, update, and modify information in the building information model. BIM is a tool, not a delivery method, and is quite powerful when the entire project team can see the impact of decisions in-

ASSOCIATION OF AMERICA (COAA), ASSOCIATION OF HIGHER EDUCATION FACILITIES OFFICERS, ASSOCIATED GENERAL CONTRACTORS OF AMERICA (AGC), and AMERICAN INSTITUTE OF ARCHITECTS (AIA), INTEGRATED PROJECT DELIVERY FOR PUBLIC AND PRIVATE OWNERS 3 (2010).

stantly and comprehensively upon constructability and schedule. BIM has become an essential element of collaborative project delivery.⁵⁹¹

c. Design Sequencing —Caltrans

In California, Caltrans experimented with design sequencing in several projects before the advent of DB authority. Design sequencing may be an option for those transportation agencies that lack DB authority.

In Design sequencing, the agency prepares the design in phases that will allow the start of construction when the design phase is complete. The agency delivers the remaining phases of design at predetermined dates after construction has started. The bid documents contain all necessary items, but do not contain completed estimates since the design has not been completed.⁵⁹²

The advantages include faster project delivery. Disadvantages include agency retention of the risk, and potential for construction inefficiency owing to conflicting or overlapping work between the initial sequence and subsequent sequences, unforeseen site conditions, and third-party conflicts during construction. 593

C. ELEMENTS OF THE PUBLIC CONSTRUCTION CONTRACT

1. Agency's Responsibility for Contract Plans, Specifications, and Technical Information

a. Requirement for Detailed Plans and Specifications

A common feature of state competitive bidding requirements is that contracting agencies prepare plans and specifications for their construction projects.⁵⁹⁴ In addition, they must make these documents available to prospective bidders, along with other documentation to assist bidders in preparing and submitting proposals.⁵⁹⁵ Even without being specifically required by legislation, the agency's obligation to furnish detailed plans and specifications arises as a necessary implication of the requirement for competitive bidding. The objective of this policy cannot be achieved unless bidders are sufficiently well informed of the plans and specifications of the job to permit them to prepare their proposals intelligently and correctly. Whether based on statutory language or implications, the duty to provide definite plans, specifications, and technical information is

 $^{^{589}}$ 2011 Construction Law Update, Aspen Publishers, at 20–23.

⁵⁹⁰ INTEGRATED PROJECT DELIVERY, supra note 588, at 31.

⁵⁹¹ *Id*. at 18–19.

⁵⁹² ANDERSON & DAMNJANOVIC, supra note 399, at 20.

⁵⁹³ *Id*. at 21.

⁵⁹⁴ Portions of this section are derived from *Competitive Bidding and Award of Highway Construction Contracts* by Dr. Ross D. Netherton, published by the Transportation Research Board in 1976 and included in the first edition of SELECTED STUDIES IN HIGHWAY LAW, vol. 3, p. 1125: supplemental, *Id.* at 1214–51.

 $^{^{595}\,}See,\,e.g.,\,Wash.$ Rev. Code § 47.28.040 (2002).

strongly rooted in public policy and is consistently enforced by the courts. $^{596}\,$

Standard specifications published by the various state transportation agencies show a similar pattern of statements relating to the interpretation of plans, specifications, and technical information, in some instances going so far as to require bidders to examine the site of the proposed work as well as the technical documents describing the work required. Notwithstanding these disclaimers, state statutes emphasize the goal of opening up the bidding process to competition among all bidders on equal terms, including information about the job.

When courts have been called on to determine whether this duty has been met, they have adopted the same pragmatic approach. When the situation did not readily permit more precision or detail, they have found that the duty has been met by "substantial compliance." ⁵⁹⁷ In one case, the Minnesota court was concerned with the actual effect of the language on the bidder's ability to write its proposal:

The court has found that the plans and specifications were sufficiently definite and precise to afford a basis for competitive bidding. Witnesses for the respective parties differed as to the range above the minimum of 1200 horsepower that would be reasonable. They all admitted that some range would be reasonable. The question was one of fact, and the evidence sustains the court's finding. ⁵⁹⁸

Specifications that do not suffer from vagueness could, at the other extreme, become so restrictive as to preclude effective competition among bidders. However, the discretion of the contracting agency in drafting specifications for work normally will not be overruled unless it is shown to be arbitrary, oppressive, or fraudulent. 599

The form and style in which plans, specifications, and technical information are prepared are influenced more by industry customs and agency practices than by conventions and case law. In many projects, each phase of the construction—such as earthwork, concrete, structural steel, masonry, and carpentry—is treated in a separate section of the bid documents. Likewise, equipment and machinery used in the work will be described separately, and each category of basic materials will have its own section. Although no fixed rules prescribe the organization of these elements, there is a preference for arranging them as closely as practicable to the sequence of the construction operations. In all cases the drafter should bear in mind that the method used must present the plans and specifications in a

manner that enables any bidder relying on them to determine what is required in all-important details of the work.

In preparing project plans and specifications, the drafter must also consider how the description of materials and methods will facilitate the inspection and testing that is required during the construction and prior to acceptance of the finished work. For projects involving major highways or structures, there is no practical way to determine by a single test or series of tests of the finished work whether it will perform its intended function throughout its expected service life. Therefore, it is customary to control the quality of materials and workmanship by testing components as they are assembled and installed. For most types of materials and construction, contracting agencies use standard specifications and test procedures. In this published form, they are incorporated by reference into project plans and specifications, subject to the special provisions or modifications for the project.

Where contracts do not involve subject matter that is unusual or complex, and advertisements for bids omit pertinent features or descriptive information, courts tend to take a pragmatic approach and accept substantial compliance where the defective specification does not result in any practical disadvantage in preparing or evaluating bids.600 A similar standard was applied in a case in which a document was identified as "plans," even though it did not meet the technical definition of plans. The court found that the information included in the document provided boundaries, contents, and test results of borrow pits, and was provided to bidders to provide foundation material for the preparation of bids. It was thus considered part of the agency's "plans and specifications" on which the bidders were entitled to rely, even though it did not meet the definition of "plans" in the standard specifications. 601 However, in another case, where an agency specifically stated in the bid documents that pit test data was provided for information only and was not a special provision, the court held that the agency did not provide any warranty with the information. Rather, the contractor was required to determine for itself the nature of the material in the gravel pits and was not entitled to rely on the information.602

The same applies where bidders charge that a contracting agency has failed to furnish the latest and best technical information available. The limits of a contracting agency's duty in this regard are illustrated

 $^{^{596}}$ Sullivan v. State through Dep't of Transp. and Dev., 623 So. 2d 28, 30 (La. App. 1 Cir. 1993).

⁵⁹⁷ Scanlan v. Gulf Bitulithic Co., 44 S.W.2d 967, 970 (Tex. Comm'n App. 1932) (in order for specifications to be invalid, must be more than "deficient in the most trivial respect").

 $^{^{598}}$ Otter Tail Power Co. v. Village of Elbow Lake, 234 Minn. 419, 425, 49 N.W.2d 197, 202 (1951).

⁵⁹⁹ See infra note 758 and accompanying text.

⁶⁰⁰ Publantation on the Green, Inc. v. Gamble, 441 So. 2d 299, 304 (La. App. 1983) (description of land by address and location within a larger public facility approved); Platt Electr. Supply, Inc. v. City of Seattle, Div. of Purchasing, 16 Wash. App. 265, 555 P.2d 421, 430 (1976) (failure to describe warranty or method of implementing warranty).

 $^{^{601}}$ Jack B. Parson Constr. Co. v. State, by and Through Dep't of Transp., 725 P.2d 614, 616 (Utah 1986).

 $^{^{602}}$ Mooney's, Inc. v. South Dakota Dep't of Transp., 482 N.W.2d 43, 46 (S.D. 1992).

where a union that had members who would have been hired by a bidder complained that the agency did not notify bidders of a forthcoming change in the official wage determination so that it could be reflected in bidding on a federally funded construction project. The court dismissed the complaint with the following observation:

The plaintiff would expand [the highway] administrator's duty...compelling him to keep one ear pressed on the walls of the Department of Labor's Wages and Hours Division, straining to hear of prevailing wage modifications...as yet unborn, but which might issue within days or hours of an opening of bids. No such burden is imposed by [the law] as presently written, and none shall be manufactured by this court. 603

Where the technical information in question is in the form of governmental actions, prospective bidders must, along with the rest of the public, monitor the official newspapers or publications where the information is announced.

An agency has no duty to disclose to bidders on a construction project facts in its possession when its superior knowledge or silence would convey a false impression, where the agency has made no affirmative misrepresentation. ⁶⁰⁴ The agency has a duty only to provide bidders with information that will not mislead them.

Where a bid item is left out of the bid specifications, the agency may be found to have failed to provide sufficiently definite plans and specifications for the contract. ⁶⁰⁵ In such a case, the agency will be liable for any additional costs incurred by the contractor in providing that item of work.

In addition to bidders, subbidders are entitled to rely on the plans, specifications, and other bid documents that are in existence at the time that their subbids are prepared. 606

b. Responsibility for Accuracy of Specifications

When the agency sets out detailed plans and specifications for the construction of a public project, it warrants that those plans and specifications are adequate. The agency will thus bear the loss resulting from inadequate or inaccurate plans or specifications. The leading federal case on this issue is *United States v. Spearin*, a 1918 case that involved construction of a dry

dock at the Brooklyn Naval Shipyard.607 The dry dock construction necessitated relocation of a sewer line, which the contractor completed. A subsequent storm event caused failure of the sewer line due to the presence in the line of a dam that was not shown on the government's plans, and resulted in flooding of the area excavated for the dry dock. The contractor refused to rebuild the sewer, and it was unsafe to continue working in the area without doing so. The government then terminated the contract. The contractor sued for and recovered its lost profits. The United States Supreme Court held that the government was responsible for the accuracy of its specifications: "I[f] the contractor is bound to build according to plans and specifications prepared by the owner, the contractor will not be responsible for the consequences of defects in the plans and specifications."608

Further, the Court held that this responsibility was not overcome by the contractor's duty to inspect the site and to check the plans.

[T]he insertion of the articles prescribing the character, dimensions, and location of the sewer imported a warranty that, if the specifications were complied with, the sewer would be adequate. This implied warranty is not overcome by the general clauses requiring the contractor, to examine the site, to check up the plans, and to assume responsibility for the work until completion and acceptance.

In other words, the duty to inspect the site did not include a responsibility to check it in such detail, including a review of the history of the site, so as to determine the presence of the dam located inside the sewer. The contractor was entitled to rely on the government's plans as being accurate and complete and as giving it sufficient information to build what was contemplated. The government was required to bear the loss for its plans being insufficient, as it was considered to have misrepresented the site conditions.

The contractor is not liable for any defects in the project built if the defects resulted from the plans and specifications furnished to the contractor. This rule, known as the doctrine of constructibility, or the implied warranty of constructibility, is not negated by the provision of a changes clause that allows for alterations in the plans and specifications. 11

A Florida court applied the doctrine of constructibility, or the *Spearin* doctrine, in a case that involved

⁶⁰³ Operating Eng'rs Local Union No. 3, Int'l Union of Operating Eng'rs v. Hurley, 546 F. Supp. 387, 390 (D. Utah 1982).

⁶⁰⁴ Hendry Corp. v. Metropolitan Dade County, 648 So. 2d 140, 142 (Fla. App. 3 Dist. 1994) (DSC clause will be triggered only where there has been an inaccurate representation that is relied on, not where there has been no representation).

 $^{^{605}}$ Sullivan v. State, Through Dep't of Transp. and Dev., 623 So. 2d 28 (La. App. Cer. 1993) $writ\ denied,$ 629 So. 2d 1179 (La. 1993).

⁶⁰⁶ J.F. White Contracting Co. v. Department of Public Works, 24 Mass. App. Ct. 932, 508 N.E.2d 637, 639, review denied, 400 Mass. 1104, 511 N.E.2d 620 (1987).

⁶⁰⁷ 248 U.S. 132, 39 S. Ct. 59, 63 L. Ed. 166 (1918); see also K. Golden and J. Thomas, The Spearin Doctrine: The False Dichotomy Between Design and Performance Specifications, 25 Pub. Cont. L.J. 47–68 (1992).

 $^{^{608}\,}Spearin,\,248$ U.S. at 136 (citations omitted).

⁶⁰⁹ *Id.* at 137 (footnotes omitted).

⁶¹⁰ O&M Constr., Inc. v. State, Division of Admin., 576 So. 2d 1030, 1039–40 (La. App. 1 Cir. 1991), writ denied, 581 So. 2d 691 (1991).

⁶¹¹ Gilbert Pacific Corp. v. State by and Through Dep't of Transp., Comm'n., 110 Or. App. 171, 822 P.2d 729, 732 (Or. App. 1991), review denied, 830 P.2d 596.

fence construction along an Interstate highway, *Phillips & Jordan, Inc. v. State, Department of Transportation.*⁶¹² The court held that the rule that the agency is liable for unanticipated construction costs due to a latent defect in the plans and specifications did not apply. The plans and specifications had provided for clearing and grubbing of a 10-ft wide strip along the highway. They did not specify what equipment should be used. The contractor found that the brush in the area was so dense that it needed to use heavier equipment for the clearing, and that equipment used 12-ft wide blades. The result was that the contractor ended up clearing a larger area than called for in the contract, and the Florida Department of Transportation refused to pay for the extra area.

The court held that there was not a latent defect in the plans. The contractor was aware of the site conditions, and knew that its equipment of choice would clear an area more than 10-ft wide. It submitted its bid with full knowledge of these facts, and could not later claim that there was a latent defect. 613

i. Duty to Inquire Re Patent Defects or Ambiguities.— An exception to the general rule that the awarding agency warrants the adequacy of its design specifications is the principle that a contractor has a duty of inquiry with respect to a patent defect or ambiguity in the contract. 614 This duty of inquiry is created regardless of the reasonableness of the nondrafting party's interpretation of the contract. 615 A bidder has the duty to scrutinize the bid solicitation for potential problems prior to bidding.616 Upon finding an ambiguity, the contractor is charged with asking the contracting officer the true meaning of the contract. However, the contractor must inquire only as to major discrepancies, obvious omissions, or manifest conflicts in the contract provisions. 617 If the contractor fails to seek clarification of a patent ambiguity prior to submitting its bid, then it bears the risk of misinterpretation.⁶¹⁸

One court has explained the reason for the doctrine of patent ambiguity as follows:

If a patent ambiguity is found in a contract, the contractor has a duty to inquire of the contracting officer the true meaning of the contract before submitting a bid. This prevents contractors from taking advantage of the Government; it protects other bidders by ensuring that all bidders bid on the same specifications; and it materially aids the administration of Government contracts by re-

quiring that ambiguities be raised before the contract is bid on, thus avoiding costly litigation after the fact.... 619

If different interpretations of a contract are plausible, then the court will inquire as to whether the discrepancy would be apparent to the reasonably prudent contractor. It is not the contractor's actual knowledge but rather the obviousness of the inconsistency under an objective standard that imposes the duty to make inquiry. The contractor's failure to notice an obvious ambiguity does not excuse the duty of inquiry. However, the contractor's actual knowledge of an ambiguity is sufficient to create the duty of inquiry. C22

The purpose of allocating to contractors the burden to inquire about patent ambiguities is to allow the agency to correct any errors before contract award, and to ensure that all contractors bid on the basis of identical specifications. ⁶²³ In providing an interpretation to the inquiring contractor, the response would be sent to all holders of bid packages so that all bidders have the benefit of the agency's interpretation. An essential element of public bidding is a common standard of competition among bidders. All conditions and specifications must apply equally to all prospective bidders, thus permitting contractors to prepare bids on the same basis.

It is to assure a level playing field that contractors are urged in bid documents to examine the documents thoroughly, make site visits, attend prebid conferences, and raise questions about the drawings, specifications and conditions of bidding and performing the work. To every extent possible, such questions should be addressed before bid opening. 624

Where the contract contains an order of precedence clause, the contractor is entitled to rely on the representation in the document that has higher precedence, and is not required to resolve a patent discrepancy between that document and one of lower precedence. Generally, specifications will be identified in an order of precedence clause as governing over drawings where there is a discrepancy between the two. The clause is designed to excuse reporting of a patent ambiguity. It automatically removes the conflict between specifications and drawings by assigning precedence to the specifications. However, discrepancies within either specifications or drawings must still be reported.

 $^{^{612}\,602}$ So. 2d 1310 (Fla. App. 1 Dist. 1992).

⁶¹³ *Id*. at 1313.

⁶¹⁴ Department of Transp. v. IA Constr. Corp., 138 Pa. Commw. 587, 588 A.2d 1327, 1330 (1991).

 $^{^{615}}$ International Transducer Corp. v. United States, 30 Fed. Cl. 522, 527 (1994), $af\!f'd$, 48 F.3d 1235 (1995).

 $^{^{616}}$ Avedon Corp. v. United States, 15 Cl. Ct. 771, 777 (1988).

 $^{^{617}} Id$

 $^{^{618}}$ Delcon Constr. Corp. v. United States, 27 Fed. Cl. 634, 638 (1993).

⁶¹⁹ Newsome v. United States, 230 Ct. Cl. 301, 676 F.2d 647, 649 (1982) (footnotes omitted).

 $^{^{620}}$ Maintenance Eng'rs, Inc. v. United States, 21 Cl. Ct. 553, 560 (1990).

 $^{^{621}}$ Id.; $see\ also$ Troise v. United States, 21 Cl. Ct. 48, 58 (1990).

⁶²² D'Annunzio Bros., Inc. v. N.J. Transit Corp., 245 N.J. Super. 527, 586 A.2d 301, 303–04 (1991).

 $^{^{623}}$ Id. at 304.

 $^{^{624}}$ Id. at 304 (citing Collins Int'l Serv. Co. v. United States, 744 F.2d 812, 814 (Fed. Cir. 1984)).

 $^{^{625}}$ Hensel Phelps Constr. Co. v. United States, 886 F.2d 1296, 1299 (Fed. Cir. 1989).

⁶²⁶ Id. at 1298.

Whether the implied warranty of constructibility applies to specifications depends on whether they are design specifications or performance specifications. In making this determination, one must consider the language of the contract as a whole; the nature and degree of the contractor's involvement in the specification process; the degree to which the contractor is allowed discretion in carrying out performance of the contract; and the parties' usage and course of performance of the contract. 627

ii. Design Specifications.—The contractor's claim of defective design specifications is based on the Spearin principle that there is an implied warranty that design specifications, if followed, will lead to a successful product. A design specification is one that sets out in precise detail the materials to be used and the manner in which the work is to be performed. The contractor has no discretion to deviate from a design specification. The contractor bears the burden of proving that a design specification is defective and that the defect cause the contractor's difficulties. Design specifications contain the implied warranty under Spearin that if they are followed an acceptable product will result.

iii. Performance Specifications.—Performance specifications set forth objectives to be achieved, and the successful bidder is expected to exercise its ingenuity in achieving that objective, selecting the means and methods of accomplishing it, and assuming responsibility for that selection. ⁶³² Performance specifications do not contain any implied warranty of constructibility. ⁶³³ Only an objective or standard of performance is set out in the contract. ⁶³⁴ Along with control over the choice of design, methods, and materials, there is a corresponding responsibility to ensure that the end product performs as the agency desires. The contractual risk of nonperformance is thus on the contractor.

For highway and bridge construction undertaken directly by the federal government and by state agencies under federal-aid funding programs, standard specifications for materials and workmanship provide accepted criteria for preparation of bids and, subsequently, evaluation of results. However, specifications expressed

in terms of overall performance may still be used for certain items of equipment or machinery that may readily be tested prior to use by the contractor. Various types of heavy equipment, pumps, motors, generators, and other accessories may be considered as being necessary to qualify a contractor for particular work. In such cases, performance specifications for these items are frequently used, sometimes in conjunction with the additional requirement that the equipment or other items be warranted by the contractor or manufacturer to perform as proposed.

c. Use of Requests for Proposals

Statutes allowing the use of a request for proposals may allow more latitude to the agency in setting the requirements for bidding.⁶³⁵ For example, a county was found not to have violated the competitive bidding requirement for a performance bond where it used a request for proposals and limited participation to only those firms that had substantial financial resources, thereby providing reasonable assurance to the county to secure performance.⁶³⁶ Whether such deviations from basic public works project requirements will be allowed will depend on how broadly those requirements are written and on whether the authority allowing the use of requests for proposals allows those deviations.

Many states' transportation agencies have obtained statutory authority to use DB contracting, in which the contractor assumes responsibility for both design and construction. These statutes allow the use of requests for proposals as an alternative to competitive bidding, recognizing the need to evaluate the qualifications of the DB team in the same manner that other engineering contracts are evaluated.⁶³⁷

2. Required Federal Clauses

Any state DOT undertaking federal-aid highway and bridge construction contracts should become familiar with the provisions of 49 C.F.R. § 18.36, a USDOT regulation establishing detailed requirements governing procurement methods and procedures that state DOTs must comply with on federal-aid projects, or risk losing federal-aid funding for those projects.

One of that regulation's subsections, 49 C.F.R. § 18.36(i), sets forth provisions that federal-aid contracts must contain. As of 2011, these mandatory contract provisions include:

• All contracts above the simplified acquisition threshold must include administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as may be appropriate.

 $^{^{627}}$ Fruin-Colnon Corp. v. Niagara Frontier Transp. Auth., 180 A.D. 2d 222, 585 N.Y.S.2d 248, 253–54 (1992).

 $^{^{628}}$ Fla. Board of Regents v. Mycon Corp., 651 So. 2d 149, 153, $rehearing\ denied\ (Fla.\ App.\ 1\ Dist.\ 1995).$

 ⁶²⁹ Blake Constr. Co. v. United States, 987 F.2d 743, 745,
 rehearing denied (Fed. Cir. 1993), cert. denied, 510 U.S. 963,
 114 S. Ct. 438 (1993); John Massman Contracting Co. v.
 United States, 23 Cl. Ct. 24, 32 (1991).

⁶³⁰ Edward M. Crough, Inc. v. Department of General Services of District of Columbia, 572 A.2d 457, 468 (1990).

⁶³¹ Blake Constr. Co., 987 F.2d at 745.

 $^{^{632}}$ *Id*.

 $^{^{633}}$ John Massman Contracting Co. v. United States, 23 Cl. Ct. 24, 32 (1991).

⁶³⁴ Fruin-Colnon Corp., Traylor Bros, Inc. and Onyx Constr. & Equipment, Inc. v. Niagara Frontier Transp. Auth., 180 A.D. 2d 222, 585 N.Y.S.2d 248, 253 (1992).

⁶³⁵ See ABA Model Code, supra note 60, at § 3-203.

 ⁶³⁶ Stapleton v. Berks County, 140 Pa. Commw. 523, 593
 A.2d 1323, 1331, appeal denied, 604 A.2d 251, 529 Pa. 660 (1991).

 $^{^{637}\,}See$ notes 311 through 318 and accompanying text.

- All contracts in excess of \$10,000 must include provisions for termination for cause and for convenience by the grantee or subgrantee, including the manner by which termination will be effected and the basis for settlement.
- All construction contracts in excess of \$10,000, including all subcontracts in excess of \$10,000 issued under such contracts, must include Equal Employment Opportunity (EEO) provisions in compliance with Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 C.F.R. Chapter 60).
- All contracts and subcontracts for construction or repair must include provisions in compliance with the Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 C.F.R. Part 3).

When required by federal grant program legislation, all contracts for construction in excess of \$2,000 must include federal prevailing rate provisions in compliance with the Davis-Bacon Act (40 U.S.C. 276a to 276a-7) and U.S. Department of Labor regulations (29 C.F.R. Part 5).

- All construction contracts in excess of \$2,000, and any other contracts involving the employment of mechanics or laborers in excess of \$2,500, must include provisions in compliance with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327–330) as supplemented by Department of Labor regulations (29 C.F.R. Part 5).
- All contracts must include notice of awarding agency requirements and regulations pertaining to reporting.
- All contracts must include notice of awarding agency requirements and regulations pertaining to patent rights with respect to any discovery or invention that arises or is developed in the course of or under such contract.
- All contracts must include awarding agency requirements and regulations pertaining to copyrights and rights in data.
- All contracts must include provisions requiring access by the grantee, the subgrantee, the federal grantor agency, the Comptroller General of the United States, or any of their duly authorized representatives to any books, documents, papers, and records of the contractor that are directly pertinent to that specific contract for the purpose of making audit, examination, excerpts, and transcriptions.
- All contracts must require retention of all required records for 3 years after grantees or subgrantees make final payments and all other pending matters are closed.
- All contracts and subcontracts in excess of \$100,000 must include environmental provisions requiring compliance with all applicable standards, orders, or requirements issued under Section 306 of the Clean Air Act (42 U.S.C. 1857(h)), Section 508 of the Clean Water

Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 C.F.R. Part 15).

• All contracts must include provisions on mandatory standards and policies relating to energy efficiency, which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. No. L. 94–163, 89 Stat. 871).

In addition to the above, 23 U.S.C. § 112(e) and 49 C.F.R. § 18.36(r) require that all highway and bridge construction contracts include standardized contract clauses concerning site conditions, suspension of work, and material changes in the scope of work for highway construction contracts. These requirements are discussed further below.

The latest information regarding the impact of the 2012 enactment of the new MAP-21 federal surface transportation funding legislation, applicable by its terms to projects from July 2012 through the end of FY 2014 in September 2014, upon the above requirements for inclusion of specified clauses in federal-aid projects, or adding any new required clauses, can be found on FHWA's Web site.⁶³⁸

a. Clauses Required in Form FHWA-1273

Since 1994, FHWA has also had a standard form document, form FHWA-1273, "Required Contract Provisions Federal-Aid Construction Contracts," which it requires state DOTs to incorporate into federal-aid state highway and bridge construction and reconstruction projects, and to physically include in every federalaid transportation project construction contract. While the 2014 update to this current volume was in preparation, FHWA undertook a federal rulemaking proceeding to revise form FHWA-1273. Commenced in January 2012, this was concluded with a June 2012 notice of final action, adopting the revised form to be effective on a mandatory basis on and after August 9, 2012.639 As this form may be revised again from time to time in the future, practitioners are advised to check FHWA's Web site periodically for any further revisions.

This form is viewable on FHWA's Web site, and can also be downloaded as a PDF file.⁶⁴⁰ The form requires that its provisions must be set out in full and cannot be incorporated by reference, and that breach of any of the

⁶³⁸ FHWA, Moving Ahead for Progress in the 21st Century Act (MAP-21), A Summary of Highway Provisions, July 17, 2012, http://www.fhwa.dot.gov/map21/summaryinfo.cfm, last accessed on July 25, 2012.

⁶³⁹ FHWA Docket No. FHWA-2011-0122, Revision of Form FHWA-1273; NPRM 77 Fed. Reg. 4880 (Jan. 31, 2012); Notice of Final Action, 77 Fed. Reg. 37954 (June 25, 2012); mandatory effective date of new form, Aug. 9, 2012. For links to the NPRM, Notice of Final Action, and other related materials, see http://www.fhwa.dot.gov/programadmin/contracts/1273/, last accessed on July 25, 2012.

requirements may be grounds for termination of the contract.⁶⁴¹ Further, breach of specific sections may be considered grounds for federal debarment. Since the form is lengthy and its provisions are detailed, they will not be summarized here in any detail. In general terms, they cover the following, but state DOTs should review the form itself, including any updates on FHWA's Web site, for the details:

- General provisions, including requirements governing subcontracts as well as contracts.
- Nondiscrimination provisions, including lengthy and detailed EEO and DBE provisions. Part II of Form FHWA-1273 covers in detail the nondiscrimination requirements applicable to all federal-aid contracts, including equal employment opportunity, DBE requirements, and record keeping requirements. This is discussed in more detail in Section 4.
- Provisions requiring nonsegregated facilities and prohibiting segregated facilities. Part III contains strict requirements for nonsegregated facilities, one of which is that the contractor and its subcontractors certify to FHWA that they do not utilize segregated facilities. A breach of this certification will be considered a violation of the EEO provisions.
- Labor standards that must be addressed include the agreement to refrain from discrimination against labor from other states and not to employ convict labor, with the exception of convicts on parole, probation, or work release.⁶⁴²
- Provisions on payment of predetermined minimum wages, in accordance with the Davis-Bacon Act and U.S. Department of Labor regulations, including maintenance of payroll records so that prevailing wages may be verified. Part VIII requires adherence to applicable federal, state, and local laws governing health, safety, and sanitation.
- Provisions requiring submission of statements of compliance and maintenance of payroll records, including compliance with the Copeland Act and U.S. Department of Labor regulations, 29 C.F.R. Part 3, implementing that Act.
- Provisions on records of materials, supplies, and labor, requiring that contractors maintain records in accordance with form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," which apply to all federal-aid projects except projects costing less than \$1 million or those involving rail crossing protective devices, highway beautification, or force-account contracts
- Provisions in Part VII of the form on the conditions under which the contractor will be allowed to subcontract work or assign the contract which, among other things, require the contractor to perform at least 30 percent of the work of the project with its own forces,

- Provisions on safety and accident prevention implementing the Contract Work Hours and Safety Standards Act, 40 U.S.C. § 333; requiring compliance with all applicable federal, state, and local laws governing safety, health, and sanitation, per 23 C.F.R. Part 635; and making OSHA regulations, 26 C.F.R. Part 1926, applicable to federal-aid construction sites.
- Provisions on false statements concerning highway projects requiring the posting of the full text of 18 U.S.C. § 1020 in a location readily available to all personnel on a federal-aid construction site.
- Provisions concerning implementation of the Clean Air Act and the Federal Water Pollution Control Act. Part X of the Form requires compliance with provisions of the Federal Clean Air Act⁶⁴⁴ and the Federal Water Pollution Control Act (the Clean Water Act).⁶⁴⁵ This particular section is presented as a stipulation that the contractor or subcontractor is in compliance with these provisions, the violation of which is grounds for termination under Part I of the form.
- Provisions, in accordance with 49 C.F.R. Part 29, regarding debarment, suspension, ineligibility, and voluntary exclusion. Contractors and subcontractors are required under Part XI of the form to certify that they are not presently debarred, suspended, or otherwise ineligible from participating in a federally funded contract by any federal agency; that they have not within the previous 3 years been convicted or had a civil judgment imposed against them for offenses such as fraud, embezzlement, or false statements; and that they have not within the previous 3 years had a contract terminated for default.
- Provisions, in accordance with 31 U.S.C. § 1352 and 49 C.F.R. Part 20, regarding the use of contract funds for lobbying. Part XII of the form requires contractors to certify that no contract funds have been or will be used for lobbying elected officials or public employees.
- In the case of Appalachian contracts only, provisions concerning employment preference for Appalachian contracts.

While some of the required clauses in form FHWA-1273 cover the same matters as the requirements set forth in 49 C.F.R. § 18.36(i), form FHWA-1273 does not cover all of the matters addressed in 49 C.F.R. § 18.36(i), and 49 C.F.R. §1 8.36(i) does not cover all of the requirements set forth in form FHWA—they are partially overlapping, rather than identical. So while state DOTs must incorporate form FHWA-1273 in all their federal-aid highway and bridge construction and reconstruction contracts, that is not alone sufficient to comply with all USDOT requirements for contract clauses. In addition to using form FHWA-1273, they

excluding specialty items, and prohibit the subcontracting of any portion of the project without the written approval of the state DOT administering the contract.

⁶⁴¹ Form FHWA-1273, pt. 1.

^{642 23} C.F.R. § 635.117(a) (2001).

^{643 23} C.F.R. § 635.118; Form FHWA-1273, pts. IV and V.

^{644 42} U.S.C. § 7401 et seq.

^{645 33} U.S.C. § 1251 et seq.

must also review the standard contract documents used for their federal-aid projects to ensure that those standard documents include provisions addressing all of the requirements in 49 C.F.R. § 18.36(i).

Where procurement regulations require that a contract contain a particular clause, the contract will be read as though it contained that clause, even if it is omitted. Federal regulations have the force and effect of law and must be deemed to be terms of the contract even if not set forth in the contract; the contractor is charged with knowledge of the regulations. Further, the regulations will apply even if inconsistent with a contract provision. 648

However, where statutes, regulations, or policies of the contracting agency require that certain provisions must be included in all of the agency's construction contracts, they generally are incorporated into standard forms that all bidders must use. Typically, some of these provisions are concerned with procedures to be followed during performance of the contract so that administrative processing will be facilitated. Others impose positive duties on the contractor in the performance of the contract that may affect its methods of operation, and therefore must be reflected in the contractor's bid.

Examples of both types occur in the required provisions for federal-aid highway construction contracts. Requirements for keeping records and making reports on acquisition of materials, supplies, and labor illustrate the type of provisions dealing with contract administration. Requirements that contractors comply with provisions of federal environmental protection laws and federal labor standards illustrate factors that must be considered in calculating bid prices. Contracts for direct federal construction projects require compliance with the Buy American Act and the Walsh-Healey Act.

The federal regulations require that the required clauses be included in all prime contracts for federal-aid funded construction, and that the contractor be similarly required to include the clauses expressly in its subcontracts.⁶⁵² It is not sufficient to incorporate the clauses by reference.⁶⁵³

b. Standardized Changed Conditions Clauses

In addition to the required clauses set out in Form FHWA-1273, the regulations contain additional required clauses regarding changed conditions.

i. Differing Site Conditions.—One of the longest utilized required federal clauses is the Differing Site Conditions (DSC) clause. It was preceded by a similarly worded provision that was known as the Changed Conditions clause. Cases interpreting these clauses date back almost half a century. The contractor generally accepts the risk that subsurface or other latent physical conditions may be difficult to determine prior to construction and that they may be adverse. The Supreme Court noted in that case that: "Where one agrees to do, for a fixed sum, a thing possible to be performed, he will not be excused or become entitled to additional compensation, because unforeseen difficulties are encountered...."656

The federal government has been concerned that because of this rule, contractors will have to price into their bids the risk that "unforeseen difficulties" such as adverse subsurface conditions will cause the project costs to exceed the bid price. In addition, contractors will have to factor into their bid prices the cost of investigating subsurface soil conditions.

The purpose of the changed conditions clause is thus to take at least some of the gamble on subsurface conditions out of bidding. Bidders need not weigh the cost and ease of making their own borings against the risk of encountering an adverse subsurface, and they need not consider how large a contingency should be added to the bid to cover the risk. They will have no windfalls and no disasters. The government benefits from more accurate bidding, without inflation for risks that may not eventuate. It pays for difficult subsurface work only when it is encountered and was not indicated in the logs. ⁶⁵⁷

The use of the DSC clause shifts the risk of adverse subsurface or other latent physical conditions from the contractor to the government. Otherwise, if the contract is silent about the risk of unforeseen conditions, the contractor would bear the risk even though those conditions might significantly increase the cost of the project. Freventing contractors from bidding on a "worst-case scenario" basis is the goal of inclusion of the DSC clause. The clause imposes on the government the risks for conditions that the contract documents fail to disclose, but leaves upon the contractor the costs of en-

⁶⁴⁶ District of Columbia v. Org. for Envtl. Growth, Inc. (OFEGRO), 700 A.2d 185, 198–99 (D.C. App. 1997).

 ⁶⁴⁷ Century Marine, Inc. v. United States, 153 F.3d 225, 228
 n.1 (5th Cir. 1998); General Eng'g & Mach. Works v. O'Keefe,
 991 F.2d 775, 780 (Fed. Cir. 1993).

⁶⁴⁸ OFEGRO, 700 A.2d at 199.

 $^{^{649}}$ Form FHWA-1273, Part VI, available on FHWA's Web page at

http://wwwcf.fhwa.dot.gov/programadmin/contracts/1273.htm.

 $^{^{650}}$ Id. pts. IV and X.

 $^{^{651}\,41}$ U.S.C. §§ 10a and 35 (1999).

^{652 23} C.F.R. § 633.102(d), (e) (1999).

 $^{^{653}}$ Id.

 $^{^{654}}$ See, e.g., United States v. Rice, 317 U.S. 61, 66–68, 63 S. Ct. 120, 123–23, 87 L. Ed. 53 (1942) (interpreting Changed Conditions clause).

 $^{^{655}}$ See Spearin, supra note 7.

⁶⁵⁶ *Id.* at 136.

⁶⁵⁷ Olympus Corp. v. United States, 98 F.3d 1314, 1317 (Fed. Cir. 1996) (quoting from Foster Constr. C.A. & Williams Bros. Co. v. United States, 193 Ct. Cl. 587, 435 F.2d 873, 887 (Ct. Cl. 1970)).

 $^{^{658}}$ Iacobelli Constr., Inc. v. County of Monroe, 32 F.3d 19, 23 (2d Cir. 1994).

 $^{^{659}}$ Id.

countering conditions described in the contract.⁶⁶⁰ The result is that the government should as a rule get lower bids, and only pay for DSCs when they actually occur, rather than funding a contingency in each contract.

The DSC clause applies only to those conditions that exist at the time of contract execution. It does not apply to conditions that develop during performance of the contract.⁶⁶¹ This is true even if this time limitation is not expressed in the clause itself or elsewhere in the contract.⁶⁶² The DSC clause is addressed in greater detail in Section 5.

- ii. Suspension of Work. This clause allows the project engineer to adjust the compensation and/or schedule to account for delays that are ordered by the engineer and that are "an unreasonable period of time," which is defined as "not originally anticipated, customary, or inherent to the construction industry." 663
- *iii. Significant Changes in Character of Work.*—This clause defines "significant change" as:
 - (A) When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or
 - (B) When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity.⁶⁶⁴

This clause reserves to the engineer the right "to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project."665 It further provides that such changes "shall not invalidate the contract nor release the surety."666 The contractor is entitled to an adjustment, including anticipated profit, in the event of a significant change.⁶⁶⁷ Change provisions are intended to compensate the contractor for burdens not contemplated by the contract.⁶⁶⁸ To qualify for an adjustment under a changes provision, the contractor must prove that any increased costs arose from conditions differing materially from those indicated in the bid documents, and also that the changes were reasonably unforeseeable in light of the information available to the contractor. 669

c. Noncollusion

The federal regulations require that the state agency provide a form to be executed by each bidder, and included in the contract, stating that the bidder has not engaged in collusive behavior:

Each bidder shall file a statement executed by, or on behalf of the person, firm, association, or corporation submitting the bid certifying that such person, firm, association or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action, in restraint of free competitive bidding in connection with the submitted bid. Failure to submit the executed statement as part of the bidding documents will make the bid nonresponsive and not eligible for award consideration. 670

d. Nondiscrimination

All contracts with participation by any branch of the U.S. Department of Transportation are required to comply with the nondiscrimination provisions of 49 C.F.R. Section 21, which implements Title VI of the Civil Rights Act of 1964 in federal transportation programs. Appendix C to this section provides illustrations of how this section applies to the various operations of the Federal Aviation Administration, FHWA, and the Federal Transit Administration (formerly the Urban Mass Transit Administration).

e. Prompt Payment

The 1999 FHWA Disadvantaged Business Enterprise (DBE) regulations were written to address the constitutional deficiencies identified in the program in Adarand Constructors, Inc. v. Pena. 671 Chief among these was the requirement that the program be "narrowly tailored" to address a compelling governmental interest. As part of the "narrow tailoring" requirement, FHWA included a number of "race-neutral" measures that are intended to benefit all small or new businesses, not just those owned by minorities or women. Among these is a requirement for prompt payment of subcontractors by prime contractors. 672 FHWA specifically found: "It is clear that DBE subcontractors are significantly—and, to the extent that they tend to be smaller than non-DBEs, disproportionately—affected by late payments from prime contractors. Lack of prompt payment constitutes a very real barrier to the ability of DBEs to compete in the marketplace...."673

The regulation requires that federal-aid recipient agencies include in their DBE programs a requirement for a prompt payment clause to be included in every prime contract in which there are subcontracting possibilities.⁶⁷⁴ Federal regulations in 49 C.F.R. 26.29, Par-

 $^{^{660}}$ Id.

⁶⁶¹ See Olympus Corp. v. United States, 98 F.3d 1314, 1317 (Fed. Cir. 1996); John McShain, Inc. v. United States, 179 Ct. Cl. 632, 375 F.2d 829 (1967).

⁶⁶² Olympus, 98 F. 3d 1314.

⁶⁶³ 23 C.F.R. § 635.109(a)(2) (1999).

 $^{^{664}}$ 23 C.F.R. \S 635.109(a)(3)(iv) (1999). Changes are addressed in more detail in Section 5.

⁶⁶⁵ 23 C.F.R. § 635.109(a)(3)(i) (1999).

 $^{^{666}}$ Id.

⁶⁶⁷ 23 C.F.R. § 635.109(a)(3)(ii) (1999).

⁶⁶⁸ Willamette Crushing Co. v. State By and Through Dep't of Transp., 188 Ariz. 79 932 P.2d 1350, 1352 (1997).

 $^{^{669}}$ Id.

⁶⁷⁰ 23 C.F.R. § 635.112(f) (1999).

 $^{^{671}\,515}$ U.S. 200, 115 S. Ct. 2097, 132 L. Ed. 2d, 158 (1995).

^{672 49} C.F.R. § 26.29 (2000).

^{673 64} Fed. Reg. 5096, at 5105-06 (Feb. 2, 1999).

⁶⁷⁴ Id.; 49 C.F.R. § 26.29(a) (2000).

ticipation by Disadvantaged Business Enterprises, require that state highway agencies have a contract clause that requires prime contractors to pay subcontractors for satisfactory performance of work within 30 days from receipt of payment from the public agency. FHWA mandates inclusion of these provisions in all subcontracts. The regulations also provide for full payment of retainages within 30 days after the subcontract work is satisfactorily completed.

State transportation agencies have three options:

- 1. Declining to hold retainages from prime contractors and prohibiting prime contractors from doing so.
- 2. Declining to hold retainages from prime contractors, and instead mandating a contract clause that obligates the prime contractor to make prompt and full payment to subcontractors of any held retainages within 30 days after the subcontractor's work is satisfactorily completed.
- 3. Continuing to hold retainages from the prime, providing for prompt and regular incremental payment acceptance of portions of the prime contract, paying retainages to prime contractors upon acceptance, and requiring a contract provision that obligates the prime contractor to pay any owed retainages to subcontractors for satisfactory completion of the affected work within 30 days after the prime's receipt of payment.

In addition, the regulation provides for *suggested* contract provisions that include reference to appropriate alternate dispute resolution provisions to resolve payment disputes, and a contract clause providing that the prime will not be entitled for reimbursement for subcontractor work until the prime ensures that the subs are promptly paid for the work they have performed, and other mechanisms to ensure that DBEs are fully and promptly paid. States have generally opted to release retainages for all contractors to comply with the above requirements.

It should be noted that economic recovery legislative proposals may possibly lead to enactment of a general federal prohibition against states with holding any retainages from contractors on any federal-aid projects.

The regulation requires that agencies include in their prime contracts an enforcement mechanism for prompt payment of subcontractors. This may be either an alternative dispute resolution process for the resolution of payment disputes, or a provision stating that the prime contractor will not be paid for its work unless it ensures that subcontractors are promptly paid for their work, or any other mechanism consistent with the regulation and with state law.⁶⁷⁵

A prompt pay clause does not preclude the prime contractor from withholding payments from the subcontractor based on identifiable claims.⁶⁷⁶

i. "Pay when paid."—The prompt-pay requirement would appear not to interfere with the prime contractor's use of a "pay when paid" clause in its subcontracts, since it does not apply until the prime contractor has been paid by the agency. The "pay when paid" clause, or "pay if paid," allows the prime contractor to condition its payment to the subcontractor on its prior receipt of payment from the agency.677 Most jurisdictions that have considered these clauses do not construe them to release the prime contractor from its obligation to pay the subcontractor if the owner fails to perform. Rather the clause merely affects the timing of payments, regardless of whether the owner performs.⁶⁷⁸ Courts will not shift the risk of the owner's nonperformance, or failure to pay, to the subcontractor unless the language of the clause clearly indicates that the parties intended to do so. 679 On the other hand, where the language expressly states that receipt of payment from the owner or the agency is a condition precedent to payment being owed to the subcontractor, the court will treat it as a condition precedent. 680 But because condition precedents are not favored, there must be clear contract language to create them.

f. Termination of Contract

The FHWA regulations require that state highway construction contracts using federal funds contain some provision for termination of the contract, both for default and for public convenience:

All contracts exceeding \$2,500 shall contain suitable provisions for termination by the State, including the manner in which the termination will be effected and the basis for settlement. In addition, such contracts shall describe conditions under which the contract may be terminated for default as well as conditions where the contract may be terminated because of circumstances beyond the control of the contractor.⁶⁸¹

g. "Buy America" Requirements

A federal statute and FHWA regulations adopted in 1983 imposed Buy America requirements for federal-aid projects. 682 As FHWA's Web site indicates, these regula-

^{675 49} C.F.R. § 26.29(b) (2000).

 ⁶⁷⁶ Pottstown Fabricators, Inc. v. Manshul Constr. Corp.,
 927 F. Supp. 756, 757 (S.D.N.Y. 1996) (applying state prompt
 pay statute allowed prime contractor to withhold payments to

satisfy claims, liens, or judgments against subcontractor where those had not been discharged).

 $^{^{677}}$ See Urban Masonry Corp. v. N&N Contractors, Inc., 676 A.2d 26, 36 n.19 (D.C. App. 1996) (example of "pay when paid" clause).

 $^{^{678}}$ Koch v. Construction Technology, Inc., 924 S.W.2d 68, 71 and n.1 (Tenn. 1996).

 $^{^{679}}$ Id; see also Thomas J. Dyer Co. v. Bishop Int'l Eng'g Co., $303~\rm{F.2d}$ $655,\,660{-}61$ (6th Cir. 1962).

⁶⁸⁰ See Urban Masonry, note 677 supra, at 36.

^{681 23} C.F.R. § 633.210 (1999).

⁶⁸² 23 U.S.C. § 313; 23 C.F.R. § 635.410; and see FHWA's Nov. 25, 1983, Final Rule, available at http://www.fhwa.dot.gov/programadmin/contracts/112583.cfm, last accessed on Sept. 8, 2013. The "Buy America" program must be distinguished from "Buy American," which applies to federal direct procurements. 41 U.S.C. 10a-10c.

tions require that a state's specifications require the use of domestic steel and iron products, and also requires that all manufacturing of these products (including protective coatings) have occurred in the United States. 683 The 2012 enactment of the Federal MAP-21 surface transportation funding legislation reportedly includes certain provisions amending previously existing Buy America provisions, including one that would end a project segmentation loophole that had sometimes been used to avoid requiring the use of American-made steel, iron, and manufactured items in highway and bridge projects. Practitioners should refer to FHWA's Web site for the latest available information concerning current Buy America requirements.

A state may obtain a waiver of this requirement from the FHWA Regional Administrator if the state can show that the product is not produced in the United States in sufficient and reasonably available quantities that are of a satisfactory quality. Pursuant to federal legislation enacted in 2008 and 2010, however, the U.S. Secretary of Transportation is required to provide informal public notice and an opportunity for comment at least 15 days prior to granting any such waiver, and must submit an annual report to the Congressional Appropriation Committees on any waivers granted to Buy America Requirements. 684 Due to that new requirement, FHWA now requires that any state DOT seeking such a waiver submit its request to the Office of FHWA's Director of Program Administration for review and consideration.685 FHWA has also set up an Web page concerning the requirements for submission, public notice, comment, and FHWA review of such waiver requests. 686

There are also minimum usage criteria for nondomestic products, ⁶⁸⁷ and nationwide waivers for ferryboat equipment and machinery ⁶⁸⁸ and pig iron and processed, pelletized, and reduced iron ore. ⁶⁸⁹ The require-

ment for Buy America is not affected by the United States' participation in international trade agreements such as the World Trade Organization Government Procurement Agreement or the North American Free Trade Agreement, as Congress noted an exception for this requirement in its approval of these agreements. ⁶⁹⁰ This includes the U.S.– Canada Agreement on Government Procurement of February 16, 2010. ⁶⁹¹

In addition to the statute and regulations, FHWA headquarters has issued at least five policy memoranda between 1989 and 2011 providing policy guidance to state DOTs concerning FHWA's interpretation of "Buy America" requirements, all of which are accessible via FHWA's Web site. 692 State DOTs should check those memoranda for details on FHWA's interpretation of these requirements.

FHWA's Web site also includes a Web page, "FHWA's Buy America Q and A for Federal-aid Program," which provides answers to 49 frequently asked questions about Buy America requirements.⁶⁹³

h. ARRA Requirements

During 2009, Congress enacted and the President approved major federal economic stimulus legislation,

/032495.cfm, last accessed on Sept. 8, 2013.

 $^{^{683}}$ 23 C.F.R. § 635.410(b)(1); see also FHWA's Web site for a summary of Buy America requirements at http://www.fhwa.dot.gov/construction/cqit/buyam.cfm.

The regulations were amended to extended Buy America requirements to protective coatings in 1993, pursuant to ISTEA \S 1041(a); see 58 Fed. Reg. 38972 (July 21, 1993), amending 23 C.F.R. pt. 635.

⁶⁸⁴ See Consolidated Appropriations Act of 2008, Pub. L. No. 110-161, 121 Stat. 1844, Division K, § 130; the SAFETEA-LU Technical Corrections Act of 2008, P.L. No. 110-244, 122 Stat. 1572, § 117; and Consolidated Appropriations Act of 2010, Pub. L. No. 111-117, 123 Stat. 3034, Division A, § 123.

⁶⁸⁵ See FHWA Memorandum dated March 13, 2008, available at http://www.fhwa.dot.gov/construction/contracts/080313. cfm, last accessed on September 8, 2013.

⁶⁸⁶ http://www.fhwa.dot.gov/construction/contracts/waivers.cfm, last accessed on September 8, 2013.

 $^{^{687}\,}See$ http://www.fhwa.dot.gov/construction/cqit/buyam. cfm, last accessed on Sept. 8, 2013.

⁶⁸⁸ See FHWA's Feb. 9, 1994, Federal Register Notice, available at http://www.fhwa.dot.gov/programadmin/contracts /020994.cfm, last accessed on Sept. 8, 2013.

⁶⁸⁹ See FHWA's Mar. 24, 1995, Federal Register Notice, available at http://www.fhwa.dot.gov/programadmin/contracts

⁶⁹⁰ See C.F. Corr and K. Zissis, Convergence and Opportunity: The WTO Government Procurement Agreement and U.S. Procurement Reform, 18 N.Y. L. SCH. J. INT'L & COMP. LAW at 303 (1999), for a discussion of how the Buy American requirements applicable to direct federal procurement apply in light of international trade agreements.

For of the text that Agreement, http://www.ustr.gov/trade-topics/government-procurement/uscanada-agreement-government-procurement, last accessed on Sept. 8, 2013. FHWA's Web site indicates that "The Agreement identifies specific programs for coverage, however, it does not include the highway program. Thus, all Federal-aid highway projects, including those funded under the Recovery Act (excluding TIGER grants, which are subject to section 1605 of the Recovery Act), administered by FHWA will continue to be subject to the Buy America provisions in Title 23 U.S.C. 313." See http://www.fhwa.dot.gov/construction/cqit/buyam.cfm, last accessed on Oct. 16, 2010.

⁶⁹² See http://www.fhwa.dot.gov/construction/cqit/buyam. cfm; and see FHWA's July 6, 1989, memorandum at http://www.fhwa.dot.gov/programadmin/contracts/070689.cfm; FHWA's Dec. 22, 1997, memorandum at http://www.fhwa.dot.gov/programadmin/contracts/122297.cfm; FHWA's Oct. 5, 2005, memorandum at http://www.fhwa.dot.gov/construction/cqit/100405.cfm; FHWA's Mar. 13, 2008, memorandum at http://www.fhwa.dot.gov/construction/contracts/080313.cfm; and FHWA's June 11, 2011, memorandum at http://www.fhwa.dot.gov/construction/contracts/110613.cfm; all last accessed on Sept. 8, 2013.

 $^{^{693}\,}http://www.fhwa.dot.gov/construction/contracts/buyam _qa.cfm, last accessed on Aug. 2, 2012.$

known as ARRA, which included \$30.8 billion in federal-aid funding for transportation projects.⁶⁹⁴

ARRA made \$27.5 billion in federal General Fund appropriations available to FHWA for supplemental formula grants, of which roughly \$840 million was set aside for specific purposes, and an additional \$1.5 billion for discretionary grants. 695 FHWA and state DOTs obligated \$26.6 billion in funding to more than 12,000 highway and bridge projects across the United States by March 1, 2010, and also awarded 51 Surface Transportation Discretionary Grants (TIGER grants) to support other transportation projects, including highway safety, intermodal centers, commuter rail, and regional bicycle networks.696 FHWA apportioned the ARRA Highway Infrastructure Investment Funds among a variety of existing, statutorily authorized FHWA highway programs. 697 In order to provide for effective use of the funds, FHWA required its Division Administrators to develop Risk Management Plans for their divisions.698

ARRA included a number of provisions applicable to the FHWA highway funding. Among other things:

- The ARRA funds were to be in addition to previously existing funds for the fiscal years involved. 699
- \bullet At least half of the funds had to be used for projects that could start within 120 days of enactment of the legislation. 700
- ARRA-funded projects were required to use American iron, steel, and manufactured goods.⁷⁰¹
- Laborers and mechanics on ARRA-funded project were to be paid prevailing wages. 702
- The Governors of states receiving ARRA highway funding were required to certify that the states would maintain their own funding for highway projects, and to identify the amounts of funds that the states planned to

expend from nonfederal sources between the date of enactment and September 30, 2010.⁷⁰³

- \bullet Contracting procedures for ARRA projects were to include ESSA provisions for individuals with disabilities. 704
- The performance of ARRA projects was to comply with NEPA requirements.⁷⁰⁵ and
- Contracts for ARRA projects were to comply with the Federal Property and Administrative Services Act and the FAR. The FHWA paid particular attention to promoting highway work zone safety precautions for ARRA-funded projects, in coordination with FHWA's Work Zone Safety and Mobility Rule.

FHWA also established a bonding assistance program DBEs under ARRA.⁷⁰⁸ Further, FHWA sought to use the availability of ARRA funding to increase projects incorporating On-the-Job Training and Supportive Services (OJT/SS) elements.⁷⁰⁹

ARRA also included broader accountability requirements as a condition of funding. It created a Recovery Accountability and Transparency Board, composed of a Presidentially-appointed Chair and the Inspectors General from 12 federal agencies; the Inspector General of USDOT was named the Vice Chairman of the board.710 The board was empowered to audit and review the expenditure of ARRA funds; to make recommendations to federal agencies for prevention of fraud, waste, and mismanagement; to refer instances of fraud, waste and mismanagement to Federal Inspectors General; to submit quarterly and annual reports to the President and Congress; and to take various other actions intended to assure accountability and transparency in the expenditure of stimulus funding.711 OMB also issued administrative guidance to federal agencies concerning expenditure of ARRA funds.712

⁶⁹⁴ American Recovery and Reinvestment Act (ARRA) of 2009, Pub. L. No. 111-5, 123 Stat. 114; text of bill available at http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=111 _cong_bills&docid=f:h1enr.pdf, last accessed on Sept. 8, 2013. For the \$30.8 billion figure for transportation projects, see http://www.recovery.gov/Transparency/fundingoverview/Pages/fundingbreakdown.aspx#ContractsGrantsLoans, last accessed on Sept. 8, 2013.

 $^{^{695}\,}See$ http://www.fhwa.dot.gov/economic recovery/summary.htm, last accessed on Sept. 8, 2013.

 $^{^{696}}$ See http://www.fhwa.dot.gov/economic recovery/, last accessed on Sept. 8, 2013.

 $^{^{697}\,}See$ http://www.fhwa.dot.gov/legsregs/directives/notices/n4510705.htm, last accessed Sept. 8, 2013.

 $^{^{698}\,}See$ http://www.fhwa.dot.gov/economic recovery/memo 20090304.htm, last accessed on Sept. 8, 2013.

⁶⁹⁹ ARRA § 1601; see

http://www.fhwa.dot.gov/economicrecovery/summary.htm, last accessed Sept. 8, 2013.

 $^{^{700}}$ ARRA \S 1602.

⁷⁰¹ ARRA § 1605.

 $^{^{702}}$ ARRA $\$ 1606; and ARRA $\$ 1201 and 1511, see http://www.dot.gov/recovery/certifications.html, last accessed on Sept. 8, 2013.

⁷⁰³ ARRA § 1607.

⁷⁰⁴ ARRA § 1608.

⁷⁰⁵ ARRA § 1609.

⁷⁰⁶ ARRA § 1610.

⁷⁰⁷ 23 C.F.R. pt. 630 subpt. J; and see

http://www.fhwa.dot.gov/economic $recovery/workzones.htm,\ last\ accessed on Sept.\ 8,\ 2013.$

 $^{^{708}\,}See$ ARRA $\$ 1512; and http://www.fta.dot.gov/grants/13948.html.

⁷⁰⁹ See http://www.fhwa.dot.gov/economicrecovery/memo20090427.htm, last accessed on Sept. 8, 2013.

⁷¹⁰ For the Board's Web site, see ttp://www.recovery.gov/About/board

http://www.recovery.gov/About/board/Pages/TheBoard.aspx; for information on the members of the Board, including the Vice Chairman, see http://www.recovery.gov/About/board/Pages/BoardMembers.aspx; both last accessed on Sept. 8, 2013.

Pages/BoardMembers.aspx; both last accessed on Sept. 8, 2013. The Web site includes links to additional information regarding the Board's powers, functions, guidelines, reports, and other information.

 $^{^{711}\,}See$ http://www.recovery.gov/About/board/Pages/Powers_Functions.aspx, last accessed on Sept. 8, 2013.

 $^{^{712}}$ See text and links to OMB materials at http://www.recovery.gov/About/Pages/The_Act.aspx, last accessed on Sept. 8, 2013.

3. Examples of Required State Clauses

Many states' public works or transportation construction statutes set out required clauses for inclusion in construction contracts, such as clauses for termination for convenience, liquidated damages, DSCs, suspension of work, and dispute resolution. Some of these are the same as or very similar to the required federal clauses. A few of these typical state clauses are examined here, along with some newer and more unusual requirements such as value engineering clauses.

a. Liquidated Damages

Time is an essential element of the transportation contract. The costs to the public owner for administration of the contract include engineering inspection and supervision. These costs increase as the contract time increases. Similarly, road user costs increase in the same manner if the completion date is extended. Liquidated damages provide a means to recover these costs if the project is extended.⁷¹⁴

There are clear functional distinctions between I/D provisions and the purpose of liquidated damages. I/D provisions motivate the contractor to complete the work ahead of schedule and provide disincentives for late completion. Liquidated damages, by contrast, are intended to recover construction oversight costs and/or damage to the traveling public. In some states, such as New York, liquidated damages are meant to cover only damage and inconvenience to the traveling public, while a separate assessment of "engineering charges" covers state damages for late completion.

USDOT regulations (23 C.F.R. § 635.127) require state transportation agencies to establish liquidated damages as a minimum to recover overruns in contract time. RUCs are more extensive, are used to justify I/D, and are not liquidated damages. Although they are similar, RUCs are significantly greater than liquidated damages and the extended engineering costs sustained by the public agency caused by late completion.

For any highway project using any of the I/D or lane rental fees provisions (including road user fees), the calculation of RUCs is necessary. It is a measurement of the impact the transportation facility has on the traveling public. RUCs may include costs associated with travel time, vehicle operation accidents, or air quality. The need for defensible I/D provisions mandate that RUCs be based upon reasonable estimates. FHWA has provided numerous studies and references that can provide guidance on developing RUCs. 715

Liquidated damages clauses are generally favored by the courts. They save the time and expense of litigating the issue of damages by fixing in advance the amount to be paid in the event of a breach. Liquidated damages clauses serve a particularly useful function "when damages are uncertain in nature or amount or are unmeasurable."⁷¹⁶ An example of this type of damages might be costs to "public convenience" or losses suffered by the traveling public where traffic patterns are interrupted beyond the time called for in the contract.

The test for the validity of a liquidated damages clause is whether it fairly compensates the party benefiting from it for actual damages, or whether it constitutes a penalty. A clause that results in a penalty will not be enforced. Liquidated damages may be used as a disincentive for late completion; however, they must fairly relate to the actual loss suffered by the agency. The challenger has the burden of proving that a liquidated damages clause creates an unenforceable penalty. If the liquidated damages clause is stricken as a penalty, actual damages may still be awarded.

A liquidated damages clause need not be specially tailored to a particular contract. The clause will be enforced as long as the amount is not disproportionate to the loss, so as to prove that compensation was not the object, but rather that a penalty was intended.

An example of a liquidated damages clause that was found to be unenforceable as a penalty is in *Kingston Constructors v. Washington Metro Area Transportation Authority*. ⁷²¹ In that case, the Washington Metropolitan Area Transportation Authority (WMATA) was replacing transformers that contained PCB, a hazardous substance whose use is now prohibited. The contract included a liquidated damages clause charging \$1,000 per day to the contractor for late completion. WMATA had included this amount as a contingency against possible penalties that could have been imposed by the Environmental Protection Agency (EPA), even though WMATA knew that EPA did not plan to assess any penalties. The court found this to be a penalty. ⁷²²

However, an agency may be obligated in a consent decree with EPA or another regulatory agency to see that particular work is completed, and may choose or be required by its public bidding statutes to do that work by contract. If the consent decree includes a penalty for late completion of the work to be assessed by EPA against the agency, then it would appear to be reasonable to include that amount in the contract between the agency and the contractor as liquidated damages. The amount will be fixed in the consent decree and is certainly a liquidated amount from the agency's standpoint. Even though it is intended to be a "penalty" from EPA's standpoint, it would appear to be an item of

 $^{^{713}}$ See, e.g., D.C. Code $\ 2-305.07\ (2002);$ Haw. Rev. Stat. $\ 103D.501\ (1999).$

⁷¹⁴ See FHWA, supra note 401 § III, at 41–42.

 $^{^{715}}$ *Id.* at 9.

Ti6 DJ Mfg. Corp. v. United States, 86 F.3d 1130, 1133 (Fed. Cir. 1996) (quoting Priebe & Sons v. United States, 332 U.S. 407, 411, 68 S. Ct. 123, 92 L. Ed. 2d 32 (1947)).

 $^{^{717}}$ State of Ala. Highway Dep't v. Milton Constr. Co., 586 So. 2d 872, 874 (1991).

⁷¹⁸ *DJ Mfg.*, *supra* note 716, at 1134.

⁷¹⁹ See Kingston Constructors v. Washington Metro. Area Transit Auth. (WMATA), 930 F. Supp. 651, 656 (D.D.C. 1996).

⁷²⁰ *DJ Mfg.*, *supra* note 716, at 1133.

^{721 930} F. Supp. 651 (D.D.C. 1996).

⁷²² Id. at 656.

damage from the transportation agency's standpoint in that the agency only has to pay the penalty if the contractor is late in completing the work. Thus the result in *WMATA* should not preclude an agency from passing along such stipulated penalties to a contractor as liquidated damages.

b. Dispute Resolution

A disputes resolution clause generally establishes one or more procedures for resolving disputes. These may include disputes review boards, typically composed of engineers or architects; mediation; arbitration, both mandatory and nonmandatory; and litigation. The clause will generally set time limits for each type of dispute resolution to be invoked, and the manner in which it is invoked. It will also establish what individual or group of individuals has jurisdiction at each particular stage of a dispute. The absence of such a clause, a party cannot be compelled to arbitrate or to utilize other alternative dispute resolution methods.

Parties may be held to have waived the right to compel arbitration by initiating litigation. A "no waiver" provision in the arbitration or dispute resolution clause will preserve the right to utilize arbitration where litigation is initiated to obtain interim relief, such as attachment or injunction.⁷²⁵ But protracted litigation of an arbitrable dispute will waive the parties' right to compel arbitration.

The authority to enter into binding arbitration pursuant to a disputes resolution clause will be implied in the agency's authority to contract. It need not be set out expressly in statute as it will be "necessarily or fairly implied."⁷²⁶

c. Value Engineering / Life-Cycle Costs

Hawaii's public works statute requires the inclusion of a value engineering clause in contracts over \$250,000.⁷²⁷ The clause is required to provide:

- (1) That cost reduction proposals submitted by contractors:
- (A) Must require, in order to be applied to the contract, a change order thereto; and
- (B) Must result in savings to the State or county, as the case may be, by providing less costly items than those specified in the contract without impairing any of their essential functions and characteristics such as service life, reliability, substitutability, economy of operation,

ease of maintenance, and necessary standardized features; and

(2) That accepted cost reduction proposals shall result in an equitable adjustment of the contract price so that the contractor will share a portion of the realized cost reduction. 728

d. Audit Rights

Illinois' public procurement statutes require that all contracts include the requirements for the contractor's recordkeeping that will facilitate audit of the contractor's books and records. Further, it requires the following:

Every contract and subcontract shall provide that all books and records required to be maintained under subsection (a) shall be available for review and audit by the Auditor General and the purchasing agency. Every contract and subcontract shall require the contractor and subcontractor, as applicable, to cooperate fully with any audit.⁷²⁹

e. Use of State Products; Local Preference

A federal statute, 23 U.S.C. § 112, establishes FHWA's requirements for competitive bidding for construction contracts. Table 18.36(c)(2), provide as follows:

Grantees and subgrantees will conduct procurements in a manner that prohibits the use of statutorily or administratively imposed in-State or local geographical preferences in the evaluation of bids or proposals, except in those cases where applicable Federal statutes expressly mandate or encourage geographic preference. Nothing in this section preempts State licensing laws. When contracting for architectural and engineering (A/E) services, geographic location may be a selection criteria provided its application leaves an appropriate number of qualified firms, given the nature and size of the project, to compete for the contract.⁷³¹

FHWA has also issued a regulation, 23 C.F.R. § 635.409, "Restrictions on Materials," addressing the issue of whether states may impose state or local preferences for use of products or materials produced within the state on federal-aid highway or bridge projects.⁷³² The regulation prohibits state highway agencies from

http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=browse_usc&docid=Cite:+23USC112, last accessed on Sept. 8, 2013.

 $^{^{723}}$ See Washington Metro. Area Transit Auth. v. Buchart-Horn, Inc., 886 F.2d 733, 735 (4th Cir. 1989).

 $^{^{724}}$ AJM Packaging Corp. v. Crossland Constr. Co., 962 S.W.2d 906, 911 (Mo. App. 1998). An exception will be if a statute required arbitration of claims within a certain dollar limit.

 $^{^{725}}$ S & R Co. of Kingston v. Latona Trucking, Inc., 159 F.3d 80, 85 (2d Cir. 1998).

 $^{^{726}}$ Carteret County v. United Contractors of Kinston, Inc., 120 N.C. App. 336, 462 S.E.2d 816, 820 (1995).

⁷²⁷ HAW. REV. STAT. § 103D-409 (1999).

 $^{^{728}}$ Id.

⁷²⁹ ILL. COMP. STAT. 30 500/20-65 (b) (1999).

⁷³⁰ 23 U.S.C. § 112 is available at

 $^{^{731}}$ 49 C.F.R. § 18.36(c)(2) is available at http://eC.F.R..gpoaccess.gov/cgi/t/text/text-idx?c=eC.F.R.&sid=3d50ad5e260841b86bd171f32d35b9d6&rgn=div5&view=text&node=49:1.0.1.1.12&idno=49#49:1.0.1.1.12.3 .5.14 , last accessed on Sept. 8, 2013.

 $^{^{732}}$ 23 C.F.R. \S 635.409 is available at http://frwebgate.access.gpo.gov/cgi-bin/get-C.F.R..cgi?TITLE=23&PART=635&SECTION=409&YEAR=2001&TYPE=TEXT, last accessed on Sept. 8, 2013.

imposing any requirement or enforcing any procedure in connection with a project that would establish a price differential in favor of articles or materials produced within the state, or prohibit, restrict, or discriminate against articles or materials produced in or shipped from any other state. The also prohibits state highway agencies from prohibiting, restricting, or discriminating against articles or materials of foreign origin to any greater extent than permissible under USDOT and FHWA requirements, the apparent reference being to "Buy America" requirements.

FHWA's Web site states as follows: "FHWA policy prohibits contractual provisions that provide a preference for in-State materials to the exclusion of comparable materials produced outside of the State. Such provisions may give particular advantage to a designated source and thus restrict competition."⁷³⁵

The reasons for the enactment of the federal statute, and the adoption of the USDOT and FHWA regulations and policy statement, become more apparent when one considers historical case law, which in some cases has upheld the validity of state-preference statutes in the face of constitutional challenges.

State statutes may require the use of products produced in a particular location, similar to the Federal "Buy America" requirements. These statutes have been subject to the same constitutional challenges as state-preference statutes. For example, the Pennsylvania Steel Products Procurement Act requires that any Pennsylvania public works construction contract require the use of steel that is produced in the United States. The statute was challenged as being preempted by international trade agreements as well as by federal law, and as being violative of the Commerce Clause. The federal court held that the statute was valid because the State of Pennsylvania was acting as a market participant rather than as a regulator, and that the statute was not preempted.

State legislation has occasionally imposed limitations on the preparation of bids that raise questions regarding unconstitutional interference with Interstate commerce. Early consideration of state laws requiring contractors to give preference to local construction material usually took the view that such laws were discriminatory against material produced outside the state, and therefore a restraint of trade. The New York Court of Appeals explained this view:

It is a regulation of commerce between the states, which the legislature had no power to make. The citizens of

other states have the right to resort to the markets of this state for the sale of their products, whether it be cut stone, or any other article which is the subject of commerce...Under the Constitution of the United States, business or commercial transactions cannot be hampered or circumscribed by state boundary lines, and that is the effect of the statute in question... ⁷³⁹

The cases that have raised this issue have presented a wide range of situations, and factual differences have distinguished permissible preferences from prohibited practices. Arizona's law relating to award of public works contracts illustrates a type of preference that has been upheld. With respect to contractors, it provides:

[B]ids of contractors who have not been found unsatisfactorily in prior public contracts, and who have paid state and county taxes within the state of Arizona for not less than two successive years immediately prior to the making of said bid...shall be deemed a better bid than the bid of a competing contractor who has not paid such taxes, whenever the bid of the competing contractor is less than five (5) per cent lower, and the contractor making such bid, as herein provided, to be deemed the better bid, shall be awarded the contract.... Ariz. Stats. § 56-109, A.C.A. 1939.

The constitutionality of this act was upheld in *Schrey v. Allison Steel Manufacturing Co.*,⁷⁴⁰ with the Arizona Supreme Court speaking as follows:

All discrimination or inequality is not forbidden. Certain privileges may be granted some and denied others under some circumstances, if they be granted or denied upon the same terms, and if there exists a reasonable basis therefor...The principle involved is not that legislation may not impose special burdens or grant special privileges not imposed on or granted to others; it is that no law may do so without good reason...[A] statute may be allowed to operate unequally between classes if it operates uniformly upon all members of a class, provided the classification is founded upon reason and is not whimsical, capricious, or arbitrary.⁷⁴¹

States are allowed to regulate public construction contracts so as to protect or promote legitimate public interests, provided constitutional standards of reasonableness and equal treatment are satisfied. In the *Schrey* case, the question of unreasonable burdens on Interstate commerce appeared to be secondary to the question of whether the state law could be reconciled with constitutional requirements that public contracts must be awarded to the lowest responsible bidder.

4. Required Use of Exclusive Sources and "or Equal" Clauses

The contracting agency may also designate certain materials, products, or processes by standard brand names. Such designation is feasible where the items are obtainable on the open market and have been standardized by commercial use. In these cases, however, speci-

⁷³³ 23 C.F.R. § 635.409(a).

^{734 23} C.F.R. § 635.409(b).

 $^{^{735}\,}See$ http://www.fhwa.dot.gov/construction/cqit/stprefer. cfm, last accessed on Sept. 8, 2013.

 $^{^{736}}$ 73 P.S. §§ 1881-1887.

⁷³⁷ Trojan Technologies, Inc. v. Commw. of Pennsylvania, 916 F.2d 903 (3d Cir. 1990).

 $^{^{738}}$ Id. at 910 (citing White Mass. Council of Constrs. Employees, Inc., 460 U.S. 204 at 210, 103 $\$ 1042, 75 L. Ed. 2d (1983).

⁷³⁹ People ex rel. Treat v. Coler, 166 N.Y. 144, 150, 59 N.E. 776, 777 (1901).

⁷⁴⁰ 75 Ariz. 282, 255 P.2d 604 (1953).

 $^{^{741}\,}Id.$ 255 P.2d at 606 (citation omitted).

fications must be drafted carefully because of the competitive aspects of patented or proprietary products and processes.

The agency must exercise care to assure that clear reference points are provided in the description of materials and workmanship. Then project specifications are not weakened by authorizing a measure of discretion by the contractor in selection of materials and performance of construction. This generally is done by use of the term "or equal" when describing quality or specifying materials or methods. It may also be done by stating "or other methods satisfactory to the Engineer," or "…commercial grades shown on the plans…and acceptable to the Engineer." Such terms introduce elements of discretion or negotiation into the standards of performance. However, they are controlled by the context of the language and the nature of the tasks involved.

The "or equal" clause may be phrased in terms of a "substantial equivalent." One court has held this term to mean a product that is equal in value in essential and material requirements. For competitive bidding purposes, equivalency is determined by whether the item bid is both functionally and qualitatively equal or identical to the specific product in the specification to which the equivalency standard applies. The Such a specification is often used when a description of the technical construction of the component is not available. The practice is in effect a "shorthand" method of describing the type of product desired rather than spelling out the engineering specifications of the product.

The principles of fair competition are subjected to further tension where contracting agencies specify in their bid invitations that the work must be performed with certain designated materials or processes. Where specifications require use of materials or processes that are patented or otherwise obtainable only from exclusive sources, it is arguable that monopolistic control over one element of the contract's specifications could easily lead to bid rigging.

Early state court decisions generally aligned with the "Wisconsin view" or the "Michigan view" of this question. The difference in these two approaches was explained thus:

The keystone of the argument in support of the Wisconsin line of cases is that where the statute requires competitive bidding, after advertising, as a condition precedent to the power of the municipality to contract for street improvement, the statute is violated when the...contract specifications require the use of a patented or monopolized article, because there can be no real competition when the bidding is practically restricted to the individual or corporation controlling the patent; on the other hand, the fundamental reason supporting the Michigan line of cases is that, even where the statute requires competitive bidding, it...does not apply, when all the competition is allowed which the situation permits; that a mu-

nicipality should not be denied the right, for the benefit of its citizens, to avail itself of useful inventions and discoveries, even though protected by patents; and that when a city exercising its power to make the public improvements in good faith decides to contract for the use of patented articles, there is created no monopoly and no abatement in competition beyond what necessarily results from the rights and privileges given the patentee by the federal government....

In highway construction, contracts for paving and procurement of paving supplies have furnished a large proportion of the examples of patent and monopoly problems. The period 1920 to 1960 was one of noteworthy progress in this aspect of engineering; numerous patentable improvements were developed, and highway agencies naturally sought to obtain the benefits of their use. The weight of authority gradually swung to a position of approving the specification of patented or exclusive source items or their equal, provided there is no intent thereby to restrict the competition among bidders.745 In addition, practical safeguards against hardships in preparing bids often are provided by the contracting agency through advance agreements with owners of patented products or exclusive sources to allow their use by all bidders on equal terms. The question of whether contractors' offers of materials are equal has been the subject of much litigation.

a. Warranty of Commercial Availability

This is an important consideration, as by including a brand name product or component in its specifications, the agency warrants the commercial availability of that product or component. This warranty does not, however, relieve the contractor of the usual risks of nonperformance that result from the contractor's relationship with its subcontractors and suppliers, or the willingness of the supplier to provide the product within the time period specified by the contract. The agency warrants only that the sole source supplier will provide the product.

The warranty of commercial availability, in which the government warrants the commercial availability of brand name components, and the limits of the warranty, were discussed in *Edward M. Crough, Inc. v. Department of General Services of District of Columbia.* That case involved a specification for a particular type of roofing material, for which there were only two known suppliers and only one local supplier. In addition to requiring the particular roofing material, the District required a 5-year guarantee. Therefore, there was not a realistic option for the contractor to deal with anyone

 $^{^{742}}$ State $ex.\ rel.$ Polaroid Corp. v. Denihan, 34 Ohio App. 3d 204, 517 N.E.2d 1021, 1026 (1986).

 $^{^{743}}$ Edward M. Crough, Inc. v. Department of General Services of D.C., 572 A.2d 457, 461 (D.C. App. 1990).

 $^{^{744}}$ Dillingham v. Mayor, et al., of City of Spartanburg, 75 S.C. 549, 56 S.E. 381, 384 (1907).

 $^{^{745}}$ Hoffman v. City of Muscatine, 212 Iowa 867, 232 N.W. 430 (1931).

 $^{^{746}}$ Edward M. Crough, Inc. v. Department of General Services of D.C., 572 A.2d 457 (D.C. App. 1990).

⁷⁴⁷ *Id*. at 463.

 $^{^{748}\,572}$ A.2d 457 (D.C. App. 1990).

other than the one local supplier. The specification was thus considered to be a sole-source specification. Initially, the supplier agreed to supply the product, but would not provide the 5-year guarantee because it believed that the roof design was inadequate. The District then agreed to redesign the roof to accommodate the supplier's concerns, and the supplier agreed to provide the guarantee.

The contractor attempted to argue that the warranty of commercial availability had been breached. However, where there was one supplier willing to meet the terms of the specification—providing the required material and the 5-year guarantee—commercial unavailability was not shown.⁷⁴⁹

The court contrasted this contractor's situation with the facts of *Aerodex, Inc. v. United States*, in which the contract called for a particular brand name component "or approved substantial equal." The contractor found that the sole supplier of the required part refused to sell the part to the contractor or to make its specifications available to the contractor so that they could be fabricated elsewhere. There was no way to obtain either the brand name or a "substantial equal." In that case, the court found that the government had the obligation either to ascertain the availability of the component, or to provide specifications so that the component could be duplicated by the bidder or other suppliers.

b. Challenging Sole-Source Specifications

A party challenging the award of a contract who did not submit a bid will be found to have standing if it can prove that it would have submitted a bid but for the sole-source specification, that its equipment was equivalent to that specified in the bid specifications, and that the restrictions of the sole-source specification undermined the integrity of the competitive bidding process. The A sole-source specification may be found invalid and contrary to public bidding requirements if it can be shown that comparable products or systems were available. The A sole-source specification is systems.

Generally, an agency should be able to advertise for bids for and ultimately purchase the type of products that they desire, within the confines of public bidding requirements. Public bidding laws do not require that specifications be so general in description that every supplier of a product can bid on the contract, thereby denying the agency of the type and quality of goods or services that it is accustomed to. Specifications are not illegal merely because they may be met only by one vendor. They may, however, be objectionable if they are drawn to the advantage of only one manufacturer, not

for satisfying the public interest but to ensure award to that particular vendor. $^{753}\,$

Specifications cannot be so precise as to knowingly exclude all but one prospective bidder.⁷⁵⁴ If the agency should reasonably know that only one bidder can satisfy its specifications, then the agency should seek bids for a brand name or the equivalent of that product.⁷⁵⁵ The "or equal" or "or equivalent" clause may serve to eliminate a challenge to specifications that the specification is proprietary or that the agency is seeking a sole source without adequate justification.

Where the choice of materials in a contract is not for a particular brand name but rather for a particular type of material over another, the agency is given greater latitude to choose the type of material that it wishes to be used in its project. Thus, there was no valid claim for an equal protection violation by a gravel supplier challenging bid specifications that called for the use of crushed stone rather than crushed gravel.⁷⁵⁶ The Vermont DOT had rewritten its standard specifications to require the use of crushed stone rather than gravel where crushed stone was available, finding that crushed stone provided a stronger road base. 757 There was no evidence in the case that the State's exercise of choice between competing products as a consumer denied the supplier equal protection. There was no allegation in that case that there was only one available supplier of crushed stone, and there was not an argument that the specification called out a particular brand or

The agency has broad discretion to draft terms for a contract, and courts will not substitute their judgment for that of the agency in the absence of fraud or bad faith. This is particularly so where the agency shows that the particular provision calling for a specific product is reasonably required in order to meet the desired performance requirements and is free from any intent to restrict or eliminate competitive bidding. The test is whether the specification is drawn to the improper advantage of any particular member or group of the relevant industry or occupation and is not for any reason that is in the public interest, but is rather intended to ensure the award of the contract to that particular member or group. The substitute of the substitute of the substitute of the contract to that particular member or group.

Whether the use of sole-source specifications is allowed at all depends on state law. New Jersey has a

⁷⁴⁹ *Id.* at 461–62.

 $^{^{750}}$ Aerodex, Inc. v. United States, 189 Ct. Cl. 344, 417 F.2d 1361 (1969).

 $^{^{751}}$ Unisys Corp. v. Department of Labor, 220 Conn. 689, 600 A.2d 1018, 1022–23 (1991).

 $^{^{752}}$ In re 1985 Washington County Annual Financial Report Surcharge, 529 Pa. 81, 601, A.2d 1223, 1226–27 (1992).

⁷⁵³ Unisys Corp., supra note 7511, 600 A.2d at 1023.

 $^{^{754}}$ Utilimatic, Inc. v. Brick Township. M.U.A., 267 N.J. Super. 139, 630 A.2d 862, 865–66 (1993).

 $^{^{755}}$ *Id*. at 866.

 $^{^{756}}$ Hinesburg Sand & Gravel Co., Inc. v. State, 166 Vt. 377, 693 A.2d 1048, 1049 (1997).

 $^{^{757}}$ Id. at 1046–47.

⁷⁵⁸ Construction Contractors Ass'n of Hudson Valley v. Board of Trustees, Orange Community College, 149 Misc. 440, 565 N.Y.S.2d 997, 1000 (1991); see also Nev. State Purchasing Div. v. George's Equipment Co., 105 Nev. 798, 783 P.2d 949, 953 (1989).

⁷⁵⁹ Construction Contractors, supra note 758, at 1000.

statute that specifically prohibits the use of a particular manufacturer's brand in bid documents. The purpose of the statute is to maintain the policies underlying competitive bidding, which is guarding against favoritism and corruption. Each agency must determine whether its own state contracting statutes allow the use of brand names and "or equal" clauses.

c. Warranty of Specifications

Where an agency specifies a particular brand name product in its specifications, the contractor has no discretion but to use that product in order to comply with the contract. In such a situation, the brand name provision is considered a design specification that contains an implied warranty that satisfactory performance will result from adherence to the specification. However, if the contract provision contains an "or equal" clause, it is not considered a proprietary or design specification, but is rather a performance specification that does not contain an implied warranty of constructibility. However,

5. Risk Allocation through Exculpatory Clauses

Clauses in construction contracts that limit damages are considered to be in the public interest, such as those that protect the agency from claims that the agency has caused unreasonable delay.⁷⁶⁴ A party may exculpate itself prospectively for its own conduct, whether intentional or unintentional. Exculpatory clauses contained in public contracts are subject to the general rules of contract law regarding exculpatory clauses. Clauses such as "no damages for delay" or "no pay for delay" are considered exculpatory clauses. One of the requirements for exculpatory clauses is that the clause must be conspicuous and cannot be buried in the middle of other contract language. A Texas court found that a "no damages for delay" clause was invalid because it violated the requirement that an exculpatory clause be conspicuous.⁷⁶⁵ Whether a clause is conspicuous and meets the requirements for fair notice is a question of law. A clause is considered conspicuous if a reasonable person, against whom the clause is to operate, ought to have notice of it. The court found that a "no damages for delay" clause was inconspicuous where it was contained "in the midst of a multi-page, single-spaced contract." 766 The clause contained no heading or warning, nor was it typed in a conspicuous form such as larger or bolder typeface. Another problem with conspicuousness was found in a contract in which the exculpatory clause was printed on the back of the contract.⁷⁶⁷

a. No Damages for Delay

Contracting agencies may include provisions for shifting to the contractor the risk of costs caused by delay. Typically, these clauses allow only for a time extension in the event of delay. Where a no-damages-fordelay clause is enforced, the contractor will not be entitled to any damages attributable to the delay, including increased labor costs, project overhead, idle equipment, and additional bond premiums. ⁷⁶⁸

Also, as an exculpatory clause, the clause will not be enforced against the nondrafting party if it is ambiguous. Thus, where a no-damages-for-delay clause included in a subcontract provided for "only" a time extension, it did not bar damages for delay since it was ambiguous as to whether the "only" applied to time extensions or to damages.⁷⁶⁹

Another court has held that another exception to the enforceability of a no-damages-for-delay clause is when the delay is caused by the "active interference" of the agency or the agency's bad faith.⁷⁷⁰ "Active interference" is defined as something more than mere negligence, and contemplates "reprehensible behavior" beyond a simple mistake, error in judgment, lack of total effort, or lack of complete diligence. The public agency must commit some affirmative willful act, in bad faith, that unreasonably interferes with the contractor's compliance with the contract schedule.⁷⁷¹ Unless one of these exceptions applies, the clause will be strictly construed and enforced.⁷⁷²

The application of a no-damages-for-delay clause also may be limited if the arbitrary and capricious actions of the agency result in the delay.⁷⁷³ This is particularly true where the agency declines even to grant a time extension to compensate for the delay; such a refusal may be interpreted as active interference in the contract or as bad faith.⁷⁷⁴ The Connecticut court held in White Oak Corp. v. Department of Transportation⁷⁷⁵

 $^{^{760}}$ Morie Energy Management, Inc. v. Badame, 241 N.J. Super. 572, 575 A.2d 885, 887 (1990); N.J.S.A. 40A:11-13(d).

 $^{^{761}}$ *Id.* at 888.

 $^{^{762}}$ Florida Board of Regents v. Mycon Corp., 651 So. 2d 149, 153 (Fla. App. 1995). Note, however, that the specification may be challenged as proprietary if it does not allow "or equal."

⁷⁶³ *Id*. at 153–54.

 ⁷⁶⁴ Calumet Constr. Corp. v. Metropolitan Sanitary Dist. of
 Greater Chicago, 163 Ill. Dec. 255, 581 N.E.2d 206, 209–10,
 222 Ill. App. 3d 374 (Ill. App. 1 Dist. 1991), appeal denied, 587
 N.E.2d 1012.

⁷⁶⁵ Argee Corp. v. Solis, 932 S.W.2d 39, 61 (Tex. App. 1995).

 $^{^{766}}$ *Id*. at 61.

 $^{^{767}}$ Advance Elevator Co. v. Four State Supply Co., 572 N.W.2d 186, 188–89 (Iowa App. 1997).

 $^{^{768}}$ White Oak Corp. v. Department of Transp., 217 Conn. 281, 585 A.2d 1199, 1202–03 (1991).

 $^{^{769}}$ Ragan Enters. v. L & B Constr. Co., 221 Ga. App. 543, 472 S.E.2d 88, 89–90 (1996).

 $^{^{770}}$ Edwin J. Dobson, Jr., Inc. v. State, 218 N.J. Super. 123, 526 A.2d 1150 (1987).

⁷⁷¹ *Id.* at 526, A.2d at 1153.

 $^{^{772}}$ United States for Use of Wallace v. Flintco, Inc., 143 F.3d 955, 964 (5th Cir. 1998).

 $^{^{778}}$ Findlen v. Winchendon Housing Auth., 28 Mass. App. Ct. 977, 553 N.E.2d 554, 555 (1990).

 $^{^{774}}$ Miss. Transp. Comm'n v. SCI, Inc., 717 So. 2d 332, 339 (Miss. 1998).

⁷⁷⁵ 217 Conn. 281, 585 A.2d 1199 (1991); see also United States ex rel. Evergreen Pipeline Constr. Co. v. Merritt Merid-

that while a no-damages-for-delay clause is generally enforceable and not contrary to public policy, it will not be enforced if (1) the delays were caused by the agency's bad faith or willful, malicious, or grossly negligent conduct; (2) the delay was uncontemplated at the time of contracting; (3) the delay was so unreasonable that it amounted to an abandonment of the contract and the project by the agency; and (4) the delay resulted from a breach of a fundamental obligation by the agency.⁷⁷⁶

Other states' courts have found the clause to cover both anticipated and unanticipated delays. 777 All appear to agree on the other three exceptions. A Maryland court in State Highway Administration v. Griener Engineering Sciences, Inc. considered the differences between these two lines of decisions, and found that the Maryland clause did apply to delays not contemplated by the parties at the time of contracting.⁷⁷⁸ The court analyzed the "New York" line of cases, which follow Corrino Civetta Construction Corp. v. City of New York.779 This case sets out the exceptions noted in the White Oak case above, including delays uncontemplated by the parties at the time of contracting. The New York court in Corrino Civetta based its conclusion on the concept of mutual assent, that a party could not be held to have bargained away a right to assert a claim resulting from delay that the parties did not contemplate.⁷⁸⁰

The court then considered the "literal" approach, under which all delays are covered by the no-damages-fordelay clause, whether they were contemplated by the parties or not. Relying on a Wisconsin case, John E. Gregory & Son, Inc. v. A. Guenther & Sons Co., 147 Wrs. 2d 298, 432 N.W.2d 584 (1988) the court concluded that parties can mutually assent to such a clause without contemplating in particularity all potential causes of delay. The clause is included because parties realize that some delays cannot be contemplated. Indeed, one could argue that if a delay was contemplated it could be worked into the project schedule and a cost attached to it in the bid.

Other states have enforced similar clauses. A North Carolina court found a no-damages-for-delay clause to

be valid and enforceable.782 The clause was unambiguous and provided that no contract provision would be construed as entitling the contractor to compensation for delays. 783 A Georgia court found in Holloway Construction Co. v. Department of Transportation that the contract did not contain an implied warranty for the department to sequence the work of prime contractors, and that a no-damages-for-delay clause applied to bar claims for damages attributable to delays by other contractors.784 In a similar case, the Georgia court held that the grading contractor could not recover damages from the State resulting from the delay attributable to the bridge contractor's performance.785 The contract expressed the mutual intent that the State would not assume vicarious liability for delay caused by another contractor, and that a contractor's sole remedy in the event of delay was an extension of time. 786 An agency may be found to have waived the benefits of a nodamages-for-delay clause by agreeing to pay delay claims of the prime contractor, and thereby subject itself to the delay claims of subcontractors.⁷⁸⁷

ian Constr. Corp., 95 F.3d 153, 167 (2d Cir. 1996); Miss. Transp. Comm'n v. SCI, Inc., 717 So. 2d 332, 338 (Miss. 1998).

 $^{^{776}}$ White Oak Corp. v. Department of Transp., 217 Conn. 281, 585 A.2d 1199, 1203 (1991); see also Jensen Constr. Co. v. Dallas County, 920 S.W.2d 761, 770 (Tex. App. 1996); United States ex rel. Evergreen Pipeline Constr. Co. v. Merritt Meridian Constr. Corp., 95 F.3d 153, 167 (2d Cir. 1996); Miss. Transp. Comm'n v. SCI, Inc., 717 So. 2d 332, 338 (Miss. 1998).

⁷⁷⁷ Compare State Highway Admin. v Griener Eng'g Sciences, Inc., 321 Md. 164, 577 A.2d 363, 370 (1990) (applies whether particular delay contemplated by parties or not) with Department of Transp. v. Arapaho Constr., Inc., 257 Ga. 269, 357 S.E.2d 593, 594 (1987) (applies only to those types of delay contemplated by the parties).

⁷⁷⁸ Greiner Eng'g, supra note 777, 577 A.2d at 368-71.

 $^{^{779}\,67\;\}mathrm{N.Y.2d}\;297,\,502\;\mathrm{N.Y.S.2d}\;681,\,493\;\mathrm{N.E.2d}\;905\;(1986).$

⁷⁸⁰ Greiner, 577 A.2d at 368-69.

 $^{^{781}}$ Id. at 370.

APAC-Carolina, Inc. v. Greensboro-High Point Airport Auth., 110 N.C. App. 664, 431 S.E.2d 508, 516, review denied, 438 S.E.2d 197 (1993).

 $^{^{783}}$ Id

⁷⁸⁴ 218 Ga. App. 243, 461 S.E.2d 257, 260 (1995).

 $^{^{785}}$ Department of Transp. v. Fru-Con Constr. Corp., 207 Ga. App. 180, 427 S.E.2d 513 (1993).

 $^{^{786}}$ Id. at 514.

⁷⁸⁷ Findlen v. Winchendon Housing Auth., 28 Mass. App. Ct. 977, 553 N.E.2d 554, 556 (1990).

i. Effect of Suspension of Work Clause.—A suspension of work clause generally allows some compensation to the contractor where the work has been delayed. Where the contract incorporates the federally-required suspension of work clause, however, this does not necessarily operate to negate or to prohibit a no-damages-for-delay clause. The federal clause specifically provides that no equitable adjustment will be made for delays if they are excluded under any other provision of the contract. ⁷⁸⁸

ii. Delay For Environmental Testing.-Where an agency knows that construction is occurring in an area that is or likely is contaminated and where environmental testing may need to be done to determine the method of disposal of excavated material, it may include a special provision addressing the potential for delay for testing. For example, the Washington State DOT has included such a provision for construction located in the vicinity of the Commencement Bay Nearshore/Tideflats site, which is an EPA-listed hazardous site. Washington State DOT's contract included work for environmental cleanup, and provided that delays of up to 60 days could occur while the agency waited for test results in order to determine how to handle certain materials. In using such a clause, the agency should take into account the reasonable time needed to accomplish sampling, receipt of results, and determination of how to proceed in light of the results. The agency should be able to document the time needed for the delay.

iii. Prohibition of No-Pay-for-Delay Clauses.—States may prohibit the use of no-pay-for-delay clauses by statute. For example, Oregon forbids the use of such a clause in a statute that states that such a waiver is against public policy:

Any clause in a public contract for a public improvement that purports to waive, release or extinguish the rights of a contractor to damages or an equitable adjustment arising out of unreasonable delay in performing the contract, if the delay is caused by acts or omissions of the public contracting agency or persons acting therefor, is against public policy and is void and unenforceable. 789

b. Termination for Convenience

A provision in a highway construction contract allowing the state to terminate under certain specified conditions, such as for public convenience, with payment to be made only for work actually completed at the time of termination, is considered an exculpatory clause. As such, it is required to meet the requirements for such clauses.⁷⁹⁰

Standard termination for convenience clauses in public transportation contracts provide for termination caused by conditions that are beyond the control of the contractor. Grounds for termination for convenience include restraining orders or injunctions obtained by third parties: Executive Orders of the President for war, national defense, or national emergency; or acts of God. In addition, circumstances justifying termination for convenience could include loss of funding, or other circumstances that would make it in the best interest of the public agency to terminate the contract.

Termination for convenience contract provisions provide for written notice to the contractor, and should clearly set forth the contractor's obligations upon receipt of the written notice. Most state transportation standard contract documents provide for termination for convenience, but provide few details of the process or what is compensable. Strong termination for convenience provisions provide for contractors to stop work as specified, terminate all subcontracts, place no further orders for materials or services, transfer title and deliver to the agency fabricated or partially fabricated parts, return unused material to stock, develop and submit to the owner a material inventory, and to make the project site safe for the traveling public. State provisions typically include provision for the payment of completed and uncompleted work, items that are compensable and noncompensable, and a process to resolve the termination of convenience claim which include submission of claim within 60 days of termination date.791

A clearly drafted and explicit termination for convenience provision can minimize time-consuming termination disputes. Failure to list what items are compensable can lead to disputes.

In Quality Asphalt Paving, Inc. v. State of Alaska Department of Transportation and Public Facilities, 792 the contractor was seeking idle equipment damages for the period following the termination of convenience. The existing termination for convenience clause was silent on this issue. In Quality Asphalt, supra, the court affirmed the award of a limited 2-month time period after the termination for idle equipment costs based on Blue Book rates until the contractor was able to go back to work in full force. In addition, the court affirmed the award of unabsorbed overhead based upon the decision in Nolan Brothers, Inc. v. United States. 793

In the *Nolan* case, the U.S. Court of Claims awarded Blue Book idle equipment damages after termination for convenience for 1.6 months, but denied recovery of post-termination overhead. Alaska DOT subsequently redrafted its termination for convenience provisions to clarify and eliminate these damage issues from future contracts.

 $^{^{788}}$ 23 C.F.R. 635.109(a)(2) (1999); Calumet Constr. Corp. v. Metropolitan Sanitary Dist. of Greater Chicago, 222 Ill. App. 3d 374, 581 N.E.2d 206, 209, 163 Ill. Dec. 255 (1991).

⁷⁸⁹ Or. Stat. 279.063 (1) (1999).

 $^{^{790}}$ Department of Transp. v. Arapaho Constr., Inc., 180 Ga. App. 341, 349 S.E.2d 196, 198 (1981) $\it affd$, 257 Ga. 269, 357 S.E.2d 593 (1987).

⁷⁹¹ American Association of State Highway and Transportation Officials (AASHTO) Guide Specification, Division 100, at 48–49.

⁷⁹² 71 P.3d 865 (Alaska 2003).

⁷⁹³ 437 F.2d 1371 (1971).

In Vermont, a major construction contract was terminated for convenience due to court injunctions resulting from lack of environmental approvals. The contractor asserted a claim for idle equipment and underabsorbed overhead, and the applicable Vermont provisions were silent on those issues. Subsequent settlement discussions were successful, and Vermont modified its termination provision to address idle equipment and loss of overhead. ⁷⁹⁴

Ordinarily, a contract is considered to be irrevocable unless it contains terms allowing the parties to terminate the contract. Clauses such as those allowing for termination for convenience must be explicitly set out in a contract between two private parties, and in the absence of such a clause the contract is presumed to be irrevocable.

However, the doctrine of termination for convenience is an exception to the common-law requirement of mutuality of contract; the government is permitted to terminate the contract without being found to have breached the contract, if doing so is in the public interest. The United States Supreme Court has held that absent some contractual, statutory, or constitutional provision to the contrary, the government is entitled to terminate a contractor for any reason.⁷⁹⁷

This is easier to accomplish both in terms of authority and determination of compensation if the agency includes in its specifications a provision for termination of the contract for public convenience.

In addition to setting out the fact that the contract may be terminated for public convenience, the clause should also establish how the contractor is to be compensated in the event of such a termination. Examples of such clauses may be found in the standard specifications of state transportation agencies and in the federal standard specifications.

The owner is best served by having an explicit termination for convenience provision to limit exposure and liability. A standard termination for convenience clause provides the agency with broad rights to terminate the contract whenever the agency deems termination to be in the public interest. The termination clause should be explicit as to damages, to avoid any surprise, limit contractor recovery to defined damage elements, and eliminate speculative claims of unreimbursed overhead and profit. Special attention should be devoted to idle equipment and overhead to prevent compensation arguments for equipment damages that are incurred after the termination, and to preventing the recovery of anticipated profits on work not per-

formed. Some agencies permit recovery of reasonable settlement costs (including legal, clerical, and accounting costs) to prepare the termination for convenience claim, and storage and transportation costs to dispose of and protect termination inventory. Further, it limits the contractor's recovery to costs incurred as a result of the termination, payment for completed work, and costs of preparing the termination settlement proposal.799 The contractor is not entitled to anticipatory profits as damages for breach of contract unless the agency acted in bad faith or abused its discretion.800 In terminating the contract for convenience, the government limits its potential liability to the contractor to the value of the work completed at the time of the termination. The terminated contractor is entitled to its quantum merit performance under the contract, but not to its anticipated profits for work not yet performed.801 Some termination of convenience provisions prohibit compensation of any absorbed overhead, loss of anticipated profits on work not performed, or idle equipment. The major impact of a termination for convenience clause is that it relieves the agency from the obligation of paying the contractor's anticipated profits for unperformed work.802

In Department of Transportation v. Arapaho Construction, Inc., the court found that a termination clause was an exculpatory clause, and was unenforceable where the contract failed to incorporate any language explicitly referencing the clause's application to breach of contract cases. 803 Rather, the termination clause referred only to injunctions, and did not cover the agency's failure to provide required rights-of-way. Thus, the contractor was entitled to its lost profits.

A termination clause allowing the agency to terminate the contract in the event conditions arose that could prevent the contractor from proceeding with or completing the work was not considered to be the equivalent to the common law doctrine of impossibility of performance in W.C. English, Inc. v. Commonwealth, Department of Transportation. 804 Rather, the court held that the department properly terminated the contract under that clause when the contractor's cost overruns depleted the funds available to complete the project.

An ambiguity in a termination clause will ordinarily be construed against the drafter.⁸⁰⁵ Thus where a contract contained two clauses, one a general termination for convenience clause and one a more specific clause

 $^{^{794}}$ Id.

 $^{^{795}}$ Ham Marine, Inc. v. Dresser Indus., 72 F.3d 454, 460 (5th Cir. 1995).

 $^{^{796}}$ Id.

⁷⁹⁷ Board of County Comm'rs, Wabaunsee County, Kansas v. Umbehr, 518 U.S. 668, 673–74, 116 S. Ct. 2342, 135 L. Ed. 2d 843 (1996).

 $^{^{798}}$ A.J. Temple Marble & Tile, Inc. v. Long Island R.R., 172 Misc. 2d 422, 659 N.Y.S.2d 412, 414 (1997).

 $^{^{799}}$ Id.

 $^{^{800}}$ Id. at 414–15; $see\ also$ Century Marine, Inc. v. United States, 153 F.3d 225 (5th Cir. 1998).

⁸⁰¹ Hancock Electronics Corp. v. Washington Metro. Area Transit Auth., 81 F.3d 451 (4th Cir. 1996), cert. denied, 117 S. Ct. 299.

 $^{^{802}}$ D.C. v. Organization for Envtl. Growth, Inc., 700 A.2d 185, 199–200 (D.C. App. 1997).

 $^{^{803}}$ 180 Ga. App. 341, 349 S.E.2d 196, 198–99, (1986).

^{804 14} Va. App. 951, 420 S.E.2d 252, 254-55 (1992).

 $^{^{805}}$ Commonwealth of Pa. DOT v. Brozzetti, 684 A.2d 658, 665 n.14 (Pa. Commw. 1996).

that stated that the contract would be terminated only for failure to perform, inadequate performance, or lack of funding, the more specific clause controlled.⁸⁰⁶

c. Shortened Claim Filing Periods

Washington State has a statute pertaining to state highway construction that requires that any claims against the department arising out of a construction contract be filed in state court within 180 days of final acceptance of the contract by the state. Standard specifications is also included in the state's standard specification found that the provision was not unenforceable on the grounds that it was unreasonable. Rather, the court found that legislative appropriations, budgetary constraints, federal funding concerns, the state's volume of public works contracts, and the overall highway funding scheme made the shorter limitation period reasonable. Sto

6. Other Requirements

a. Subcontractor Listing Requirements

Unless a statute or the bid specifications require listing of subcontractors, none will be required. However, some states have enacted statutes that require bidders to list in their bids the subcontractors that they will contract with for the work if they are awarded the contract. An example is California's Subletting and Subcontracting Fair Practices Act. The purpose of the statute has been set out within the act as follows:

The Legislature finds that the practices of bid shopping and bid peddling in connection with the construction, alteration, and repair of public improvements often result in poor quality of material and workmanship to the detriment of the public, deprive the public of the full benefits of fair competition among prime contractors and subcontractors, and lead to insolvencies, loss of wages to employees, and other evils. 812

A case interpreting a similar statute describes "bid shopping" as the bidder's use of a low subcontract bid already received to pressure potential subcontractors into submitting lower bids.⁸¹³ "Bid peddling" is an attempt by a subcontractor to undercut a known bid that has already been submitted to the bidder on the prime contract.⁸¹⁴ Proof of actual bid shopping is not necessary to show a violation of a subcontractor listing requirement.⁸¹⁵ However, where bid shopping is shown, it will be considered to have prevented formation of the subcontract.⁸¹⁶

The California statute requires that when a bidder on a street, highway, or bridge contract intends to subcontract to a particular subcontractor an amount "in excess of one-half of 1 percent of the prime contractor's total bid or...in excess of ten thousand dollars (\$10,000), whichever is greater," then the bidder must list the name and place of business of that subcontractor.⁸¹⁷ It also requires that the agency must include the requirement for subcontractor listing either in its bid specifications or in its general conditions or standard specifications.⁸¹⁸

New Mexico has a similar statute, the Subcontractors Fair Practices Act, modeled after the California statute.819 It has the notable difference, however, of exempting highway construction work from its scope. 820 A case interpreting this statute is still instructive to the interpretation of similar statutes. In Romero Excavation & Trucking, Inc. v. Bradley Construction, a case that involved construction at a state university, the contractor was found to have violated the Act when it substituted itself for a subcontractor listed in its bid.821 The subcontractor listing statute required that the bidder list only one subcontractor per category of work. If none was listed, then the bidder was required to perform that category of work itself. The statute essentially required the bidder to commit when it submitted its bid to either using a specified subcontractor to do a category of work or to doing that work itself.

The statute provided for circumstances when a substitution of a listed subcontractor was allowed; however, none applied in this case. The court concluded that even though the statute was directed at preventing substitution of another subcontractor, that allowing the prime contractor to substitute itself for a listed subcontractor was contrary to the purpose of the Act and was a violation. 822

 $^{^{806}}$ Id.

⁸⁰⁷ Wash. Rev. Stat. §47.28.120 (2002).

 $^{^{808}}$ Washington, Standard Specifications for Road, Bridge, and Municipal Construction, \S 1-09.11(3) (2000).

 $^{^{809}}$ Yakima Asphalt Paving Co. v. Wash. State Dep't of Transp., 45 Wash. App. 663, 726 P.2d 1021, 1024 (1986).

 $^{^{810}}$ Id.

 $^{^{811}}$ See Williams Bros. Constr. v. Public Building Comm'n of Kane County, 243 Ill. App. 3d 949, 612 N.E.2d 890, 895, 184 Ill. Dec. 14 (1993), appeal denied, 152 Ill. 2d 582, 622 N.E.2d 1229, 190 Ill. Dec. 912 (1993) (Illinois Public Building Commission Act did not require subcontractor listing); Pittman Constr. Co. v. Parish of East Baton Rouge, 493 So. 2d 178, 181 (1986), writ denied, 493 So. 2d 1206 (La. App. 1 Cir. 1986).

⁸¹² CAL. PUB. CONT. CODE § 4101 (2002).

⁸¹³ Romero Excavation & Trucking, Inc. v. Bradley Constr., 121 N.M. 471, 913 P.2d 659, 662 (1996).

 $^{^{814}}$ Id. at 662; see also R.J. Land & Assocs. Constr. Co. v. Kiewit-Shea, 69 Cal. App. 4th 416, 81 Cal. Rptr. 2d 615, 617 (1999).

⁸¹⁵ Ray Bell Constr. Co. v. School Dist. of Greenville County, 331 S.C. 19, 501 S.E.2d 725, 731–32 and n.12 (1998).

 $^{^{816}}$ Pavel Enterprises, Inc. v. A.S. Johnson Co., 342 Md. 143, 674 A.2d 521, 531 (Md. App. 1996).

⁸¹⁷ CAL. PUB. CONT. CODE § 4104(a)(1) (2002).

 $^{^{818}}$ Cal. Pub. Cont. Code § 4104 (2002).

 $^{^{819}}$ N.M.S.A. \S 13-4-31 et seq. (1999).

⁸²⁰ N.M.S.A. § 13-4-35 (1999).

^{821 121} N.M. 471, 913 P.2d 659 (1996).

⁸²² Id. at 663.

Similarly, a prime contractor in California was not allowed to substitute a subcontractor listed for one category of work for a subcontractor listed for another category of work. The bid did not divide that category of work between two subcontractors, and therefore the only listed subcontractor for that category was entitled to the subcontract.⁸²³

The California statute confers a right on the listed subcontractor that it will be awarded the subcontract, even though no subcontract exists at the time of bidding. Statutory grounds for substitution are met, the prime contractor has no right to substitute another subcontractor for the one listed. The subcontractor's right to the subcontract may be enforced in an action against the prime contractor to recover the benefit of its bargain. Statute also provides for substantial penalties in the event that a violation is found. The awarding authority may, in its discretion, cancel the contract or assess a penalty against the contractor in an amount not exceeding 10 percent of the subcontract. In addition, a violation may be grounds for discipline by the state contractors' licensing board.

A federal district court has interpreted the Nevada subcontractor listing requirement as creating "pseudocontractual" obligations on the part of the prime contractor, even though the subcontractor and prime contractor have no contract with each other at bid opening.828 However, the statute makes them bound to one another in such a way as they may "disengage" only on specific statutory grounds. Under the statute, the subcontractor may obtain damages from the prime contractor for wrongful substitution.829 It may also be entitled to injunctive relief against the prime contractor and the awarding agency, if it meets the standard for an injunction by showing that damages are insufficient relief. The subcontractor may meet this requirement by demonstrating that by not getting the subcontract, it will lose an opportunity to gain experience and enhance its reputation in the community. Damages cannot compensate for this loss. $^{830}\,$

Where a statutory subcontractor listing requirement exists, it will be enforced even if not included in the bid specifications. A city was not estopped from enforcing the subcontractor listing requirement even though the bid package did not mention it, and even though the specifications referred to an American Institute of Architects provision requiring the identification of subcontractors following the contract award. 831

b. Incorporation of Statutory Requirements

Any applicable statutory requirements in place at the time of contracting will be implied, even if not fully set out in the contract. The law existing at the time and place of the contract execution is part of the contract; this applies to public contracts as well as private.⁸³²

Statutory requirements may take the form of requiring a specific clause be included in a public contract, or may simply create an obligation for the contractor to comply with a particular legal requirement. Where valid regulations require the inclusion of a specific clause in a public contract, it will be deemed incorporated by operation of law even if it is omitted from the written contract. This is true only where the required clause is consistent with the governing statute under which the contract is entered into; an inconsistent clause will not be incorporated by operation of law. States of the second states are stated into the contract is entered into; an inconsistent clause will not be incorporated by operation of law.

c. Implied Terms and Warranties

All construction contracts have an implied warranty that they will be performed in a workmanlike manner. 835 However, where the contract contains an express provision setting out the degree of competence required for the work, such an implied warranty is considered redundant, and the warranty will not be implied. 836

Like all contracts, public contracts contain an implied warranty of good faith and fair dealing.⁸³⁷ The covenant is implied by law and "obligates the parties to cooperate with each other so that each may obtain the full benefit of performance."⁸³⁸

d. Contracts Must Be in Writing

Because most transportation construction contracts are large transactions whose performance will span more than a year's time, an oral contract would likely violate the statute of frauds. Also, each agency's authority to contract is limited by the statutory language granting that authority. State and local agencies are creatures of statute, and have only those powers that the legislature grants to them. Generally, they do not

 $^{^{823}}$ R.J. Land & Assocs. Constr. Co. v. Kiewit-Shea, 69 Cal. App. 4th 416, 81 Cal. Rptr. 2d 615 (1999).

⁸²⁴ *Id*. at 618.

 $^{^{825}}$ Id.; Cal. Pub. Cont. Code § 4103 (2001).

⁸²⁶ CAL. PUB. CONT. CODE § 4110 (2002).

⁸²⁷ Cal. Pub. Cont. Code § 4111 (2001).

 $^{^{828}}$ Clark Pacific v. Krump, Constr., Inc., 942 F. Supp. 1324 (D. Nev. 1996).

⁸²⁹ Id. at 1346.

 $^{^{830}}$ Id.

⁸³¹ Gaglioti Contracting, Inc. v. City of Hoboken, 307 N.J. Super. 421, 704 A.2d 1301, 1304–05 (1997).

⁸³² City of North Charleston v. North Charleston Dist., 289
S.C. 438, 346 S.E.2d 712, 715 (1986).

⁸³³ United States v. Bills, 822 F.2d 373, 377 (3d Cir. 1987).

 $^{^{834}}$ Id.

 $^{^{835}}$ Korte Constr. Co. v. Deaconess Manor Assoc., 927 S.W.2d 395, 404 (Mo. App. 1996).

⁸³⁶ *Id*. at 404.

 $^{^{837}}$ A.C. Shaw Constr., Inc. v. Washoe County, 105 Nev. 913, 784 P.2d 9 (1989).

⁸³⁸ Record Steel & Constr., Inc. v. Martel Constr., 129 Idaho 288, 923 P.2d 995, 999 (Idaho App. 1996) (quoting Badgett v. Security State Bank, 116 Wash. 2d 563, 569, 807 P.2d 356, 360 (1991)).

have authority to make oral contracts. In addition, where a bid was lacking the bidder's signature, acceptance of that bid and making it part of a contract would have violated the statute of frauds.⁸³⁹

In Scheckel v. Jackson County, Iowa, the bidder and an assistant county engineer had a telephone conversation in which the assistant engineer informed the bidder that it was the low bidder and would get the award. State 10 Ultimately, that bidder did not receive the award. The court held that the conversation between the assistant engineer and the bidder did not give rise to a contract. Under the statute, the contract required approval of the county board of supervisors, and neither the county engineer nor the assistant had authority to make an oral contract that would bind the county. State 1

Where there is a legal requirement that the contract be in writing and that it be approved by a particular individual or body, that requirement will be strictly enforced. In *Davis, Murphy, Niemiec and Smith v. McNett*, the court found that a county code section that provided that only county commissioners could enter into contracts for the county and required that the contracts be in writing was intended to prevent fraud against the county, and thus strict compliance was required.⁸⁴²

Modifications to the contract also must be in writing, and courts will strictly enforce prohibitions on oral modifications. State Likewise, any efforts to extend a contract by oral agreement will be found to not be binding on the agency. State Likewise, and the state of the sta

An exception to this requirement is found in *PacOrd*, *Inc. v. United States*.⁸⁴⁵ In that case, the court found that the subcontractor was entitled to maintain an action against the United States in the absence of a written contract, because it was able to establish the existence of an implied-in-fact contract beyond the mere oral contract.

However, a North Dakota court did enforce an oral contract between a prime contractor and its subcontractor. In *Triton Corp. v. Hardrives, Inc.*, the street repair contractor who was interested in bidding on a city contract could not do so as it could not get a performance bond required by the city.⁸⁴⁶ It then entered into an oral agreement with another company that could qualify for the performance bond. Its arrangement was that the

street repair contractor would prepare the bid, and the second company would obtain the performance bond and submit the bid to the city. In return, the second company would be paid 10 percent of the contract price. This company was awarded the contract, but then decided that because the street repair company could not get a bond, that it would subcontract the work to someone else. The street repair company sued to recover its lost profits. The court found that a valid oral contract existed between the two contractors, and awarded the lost profits.⁸⁴⁷

Authority to contract must be express; apparent authority cannot serve as a means of holding a governmental entity to a contract. SAS A contractor relying on an individual's statement has no claim of entitlement to a contract. Further, the contractor has no claim of having been deprived of due process, as a legitimate claim of entitlement to the contract is necessary to establish a property interest. SAS

e. Specifications Are Not Rules

In Alabama Department of Transportation v. Blue Ridge Sand & Gravel, the aggrieved bidder challenged the department's standard specifications as "rules" that should have been adopted pursuant to the state Administrative Procedure Act. The court found legislative intent to support its conclusion that the standard specifications were not "agency regulation, standard or statement of general applicability that implements, interprets, or prescribes law or policy. Each standard specification was found to be a term that may be incorporated into a contract between the department and another party. Competitive bidding laws in Alabama allow a prospective bidder to challenge the inclusion of a specification; this is inconsistent with the specifications being rules.

Similarly, a Florida court held in *Department of Transportation v. Blackhawk Quarry Co. of Florida* that the department's standard specifications for road and bridge construction were not rules and did not need to be promulgated under the state Administrative Procedure Act.⁸⁵² Rather, the standard specifications set out standards for acceptance of materials, and were contract terms between the department and the agency.

Likewise, another court has held that the instructions to bidders included in the bid documents were not agency rules.⁸⁵³ The court noted that the legislature had directed the agency in its statute to develop "policy and procedure guidelines" for contract documents. This was

⁸³⁹ A.A.B. Electr., Inc. v. Stevenson Public Sch. Dist., 5 Wash. App. 887, 491 P.2d 684, 686–7 (1971).

^{840 467} N.W.2d 286, 288 (Iowa App. 1991).

⁸⁴¹ *Id*. at 289.

^{842 665} A.2d 1322, 1325 (Pa. Commw. 1995).

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⁸⁴⁴ Alco Parking Corp. v. Public Parking Auth. of Pittsburgh, 706 A.2d 343, 348 (Pa. Super. 1998) (oral agreement to renew contract not binding on board where all contracts were required to be in writing and signed by the chairman).

 $^{^{845}}$ 139 F.3d 1320, 1323 (9th Cir. 1998) (applying Federal Acquisition Regulations, 48 C.F.R. \S 2.101).

^{846 85} F.3d 343 (8th Cir. 1996).

⁸⁴⁷ Id. at 346.

 $^{^{848}}$ Hutchison v. City of Huntington, 479 S.E.2d 649, 664 n.20 (W. Va. 1996).

⁸⁴⁹ Id. at 664-5

^{850 718} So. 2d 27, 29–31 (Ala. 1998).

 $^{^{851}}$ Id. (quoting ALA. ADMIN. CODE, ch. 450-1-1 et seq.).

 $^{^{852}\,528}$ So. 2d 447, 450 (Fla. App. 1988).

 $^{^{853}}$ Cleveland Constr., Inc. v. Ohio Dep't of Admin. Services, 121 Ohio App. 3d 372, 700 N.E.2d 54, 68 (Ohio App. 1997).

found to be different from the situations in which agencies adopt "policies" that are in effect rules. The legislature used the specific terms "policy" and "guideline" where it could have used "rule."

The Florida court in the *Blackhawk Quarry* case did, however, find that the standard operating procedure adopted by the DOT for evaluating, approving, and controlling mineral aggregate sources was an administrative rule that had to be duly adopted under the Administrative Procedure Act. The operating procedure was an "agency statement of general applicability that implements, interprets or prescribes laws or policy."854 Where such a policy is adopted as a rule, the agency has broad discretion in drafting and the rule will be upheld unless arbitrary and capricious. 855 Where administrative standards are adopted by the agency to govern construction projects and do not conflict with statutes, they will be considered to have the force of law. 856

Cases from two states—Oklahoma and Oregon—note that the transportation agency's standard specifications in those states are actually adopted as agency rules.⁸⁵⁷

f. On-Call Contracts

In Faulk v. Twiggs County, the agency awarded a competitively bid contract to a contractor for on-call paving work. S58 Although the contract was indefinite as to the ultimate quantity, it contained a unit item bid price for the paving. The agency wanted to be able to pave in designated areas as funds to pay for the work became available, without letting a new contract each time. The court held that it was sufficient if the key for determination of the sum to be paid—the unit price—and the service to be rendered were contained in the contract. S59

g. Express Warranties, Extended Warranties, and Related Federal Requirements

For many years, FHWA had a longstanding policy against the use of warranty clauses on federal-aid transportation projects. However in 1995, FHWA changed its views and allowed states to include warranty provisions for construction products. Federal regulations now provide that state highway agencies may include warranty provisions for projects on the National Highway System. Federal regulations exclude maintenance items from federal participation. They provide that no warranty will be approved if, in the judgment of the FHWA Division Administrator, it may

place an undue obligation upon the contractor for items over which the contractor has no control. 860

General warranty provisions have been limited to a maximum of 2 years (see 23 C.F.R. 635.413) and should be covered in the contract documents. FHWA regulations provide that warranties are short, generally 1 to 2 years. Projects developed under PPP agreements, however, may include warranties that are appropriate for the terms of the agreement. The regulations also permit alternate warranty proposals in best-value selections, and the alternates must be in addition to the warranty in the base proposal.⁸⁶¹

A general warranty is permitted for specific construction project features, but not for the entire project since the contractor does not control the design process. Warranties may not cover maintenance, and contractors cannot warrant items over which they have no control. This has led to the use of concrete pavement warranties where the contractor can warrant the smoothness of the pavement. Warranties experience indicates that duration is from 2 to 5 years. Warranties beyond 5 years may not be cost-effective due to bonding or surety concerns. States have used warranty items for concrete pavement, bridge pavement, traffic striping, and expansion joints. If the work or project is not part of the NHS system, then warranties are covered under individual state or local laws and procedures. 862

Pavement warranties are now in widespread use by many transportation agencies. Warranties are used to specify desired performance characteristics of a particular product over a specified period of time. Pavement warranties are intended to increase pavement performance by addressing quality during the construction process, and are not intended as maintenance agreements to cover undesirable work. There are two types of warranties in use: materials and workmanship warranties and performance warranties. Material and workmanship warranties generally involve preventive maintenance operations such as crack sealing, chipping, and micro sealing. Performance warranties relate to new roadway reconstruction, and have warranty periods from 5 to 20 years in duration. 863

One practical consideration that public agencies may wish to consider in connection with the drafting and negotiation of warranty provisions, particularly in connection with long-term PPP project agreements, is appropriate provision for the enforcement of warranties in the event that the original contractor is no longer in business.

⁸⁵⁴ Blackhawk Quarry, 121 Ohio App. 3rd, at 450.

 $^{^{855}}$ Dravo Basic Materials Co. v. State, Dep't of Transp., 602 So. 2d 632 (Fla. App. 1992).

 $^{^{856}}$ Hoar v. Aetna Casualty and Surety Co., 968 P.2d 1219, 1221 (Okla, 1998).

 $^{^{857}}$ Anderson's Erosion Control, Inc. v. Oregon, $ex\ rel\ Dep't$ of Transp., 141 Ore. App. 221, 917 P.2d 537 (Ore. App. 1996); Hoar v. Aetna Casualty and Surety Co., 968 P.2d 1219, 1221 (Okla. 1998).

^{858 269} Ga. 809, 504 S.E.2d 668, 670 (Ga. 1998).

 $^{^{859}}$ Id.

^{860 23} C.F.R. 635.413.

^{861 23} C.F.R. 635.413.

 $^{^{862}}$ FHWA, supra note 401, $\$ IV, at 6–7; see http://www.fhwa.dot.gov/programadmin/contracts/core04.cfm, last accessed Aug. 2, 2012; and FHWA Construction Program Guide, Warranties, at

 $http:/\!/www.fhwa.dot.gov/construction/cqit/warranty.cfm.$

⁸⁶³ http://www.fhwa.dot.gov/pavement/warranty/.

h. Agency May Not Contract Away Essential Governmental Powers

An agency may not contract away any of the essential powers of government, including the police power, the power of eminent domain, and the power to tax. 864 Any contract provision that purports to do so will be considered void and unenforceable. 865

 864 State Street Bank & Trust Co. v. Commw. of Pa., Treasury Dep't, 712 A.2d 811, 813 (Pa. Commw. 1998).

 $^{^{865}}$ State *ex rel.* Devonshire v. Superior Court, 70 Wash. 2d 630, 424 P.2d 913, 917–18 (1967) (city could not contract away power of eminent domain or bind itself to a restricted exercise thereof).

SECTION 2

CONTRACTOR LICENSING, QUALIFICATION, AND BOND REQUIREMENTS

A. LICENSING AND PREQUALIFICATION OF CONTRACTORS

1. Licensing and Prequalification Requirements

Where eligibility requirements are imposed on bidders by state law, they generally involve compliance with contractor licensing and prequalification rules. Many states have requirements that all bidders must be licensed by the state and prequalified by the contracting agency as a condition to submission of a bid and award of a contract. These requirements have a direct relationship to determination of the lowest responsible bid. Application of these rules may vary depending on whether state or federal funding is involved. Licensing and prequalification requirements may apply to subcontractors as well as prime contractors. ²

a. Public Policy Concerning Qualification of Bidders

Contractor qualification requirements are an important part of how transportation agencies carry out their statutory obligations to award construction contracts to the "lowest responsible bidder" in competitive bidding.³ The term "lowest responsible bidder" means the bidder whose price is the lowest and whose offer adequately demonstrates the quality, fitness, and capacity to perform the work.⁴ Determination of bidder qualifications and responsibility is largely a judgmental process.⁵ Thus, the contracting officer's determination of responsibility is reviewed only for arbitrary and capricious action.⁶

Cases provide varying definitions of responsibility. One definition is "the bidder's apparent ability and capacity to perform the contract's requirements." Another states that responsibility addresses "performance, capability of bidder including financial resources, experience, management, past performance, place of performance, and integrity." Responsibility is considered to be a qualitative term, and includes trustworthiness, quality, fitness, and capacity to perform the contract satisfactorily. Another court has allowed the consideration of financial ability, skill, integrity, business judgment, experience, reputation, and quality of previous work on public contracts.

States may also define responsibility by statute. Oregon's public works statute provides that in determining if a prospective bidder has met the standards of responsibility, the public contracting agency shall consider whether a prospective bidder has:

- (i) Available the appropriate financial, material, equipment, facility and personnel resources and expertise, or ability to obtain the resources and expertise, necessary to indicate the capability of the prospective bidder to meet all contractual responsibilities;
- (ii) A satisfactory record of performance. The public contracting agency shall document the record of performance of a prospective bidder if the public contracting agency finds the prospective bidder not to be responsible under this sub-subparagraph;
- (iii) A satisfactory record of integrity. The public contracting agency shall document the record of integrity of a prospective bidder if the public contracting agency finds the prospective bidder not to be responsible under this subsubparagraph;
- (iv) Qualified legally to contract with the public contracting agency; and
- (v) Supplied all necessary information in connection with the inquiry concerning responsibility. If a prospective bidder fails to promptly supply information requested by the public contracting agency concerning responsibility, the public contracting agency shall base the determination of responsibility upon any available information, or may find the prospective bidder not to be responsible[.]¹¹

Determination of these qualifications must be made by the contracting officer on a case-by-case basis. Historically, contracting officers have resorted to four basic methods, or combinations of methods, in carrying out this function. The earliest practice relied on the contracting officer's acknowledged authority to reject any (or all) bids if he or she deems it to be in the public in-

¹ Portions of this section are derived from *Licensing and Qualification of Bidders* by Dr. Ross D. Netherton, published by the Transportation Research Board in 1976 and included in the first edition of SELECTED STUDIES IN HIGHWAY LAW.

 $^{^2}$ See 30 Del. Code $\$ 2502 (1997); PG Constr. Co. v. George & Lynch, Inc., 834 F. Supp. 645 (D. Del. 1997).

³ At least one court has held that even in the absence of a statutory requirement for doing so, public policy and economical conduct of government business require that contracts be awarded to the lowest responsible bidder. City of Phila. v. Com., Dep't of Envtl. Resources, 133 Pa. Commw. 565 577 A.2d 225, 228 (1990).

 $^{^4}$ See 30 ILL. COMP. STAT. 500/1-15.80 (2001) for a statutory definition of responsible bidder.

⁵ W. Va. Medical Institute v. W. Va. Public Employees Ins. Bd., 180 W. Va. 697 379 S.E.2d 501, 503–04 (1989) (statute requiring award to lowest responsible bidder required subjective evaluation of quality, service, and compatibility with other programs in addition to price).

⁶ See, e.g., Advance Tank and Constr. Co. v. Arab Works, 910 F.2d 761, 765 (11th Cir. 1990) (applying Alabama law); State of Nev., State Purchasing Div. v. George's Equip. Co., 105 Nev. 798, 783 P.2d 949, 954 (1989); Grand Canyon Pipelines, Inc. v. City of Tempe, 816 P.2d 247, 250 (Ariz. 1991) (agency's decision regarding a determination of responsibility must not be arbitrary).

⁷ Applications Research Corp. v. Naval Air Dev. Center, 752 F. Supp. 660, 682 (E.D. Pa. 1990).

⁸ Bean Dredging Corp. v. United States, 22 Cl. Ct. 519, 522 (1991).

⁹ Stacy and Witbec, Inc. v. City and County of S. F., 44 Cal. Rptr. 2d 472, 483, 36 Cal. App. 4th 1074, modified on denial of rehearing, review denied (1995).

 $^{^{10}}$ La. Associated General Contractors, Inc. v. Calcasieu Parish Sch. Bd., 586 So. 2d 1354, 1363 (1991).

¹¹ OR. REV. STAT. § 279.029(6)(a)(B) (2002).

terest to do so. Under this authority, a bidder's qualifications may be investigated and evaluated to the extent necessary. Courts have generally upheld the authority of contracting officers to investigate prospective contractors. They have also upheld the substantive determination of the administrative agency in the absence of any evidence of fraud, collusion, bad faith, or arbitrary and capricious conduct.¹²

A second method relies on the requirement that contractors must furnish performance bonds and other security for the protection of the general public and of individuals dealing with the contractors. Its rationale is that if a contractor can furnish the necessary bonds and sureties, the contracting officer may rely on the surety's investigation to verify the contractor's fitness.

A third method includes requirements that persons desiring to engage in general construction contracting or any of the various specialized branches of contracting must first obtain a license for this purpose. Licensing procedures normally call for a duly authorized public agency to examine the applicant and determine whether it is competent in its knowledge of engineering, construction, business administration, and laws applying to contracting, and has a good business reputation. The contracting officer may wish to rely on this license, reasoning that if an applicant is considered "responsible" enough to obtain a contractor's license, it is responsible enough to bid on and receive the award of a public works contract.

Because both surety bonding and licensing have their limitations, a fourth method—prequalification—is widely used by states to evaluate contractors' qualifications. Under this procedure, contractors wishing to bid on public works contracts must previously be determined by the contracting agency to be qualified for the category of work involved and for undertaking a project of the size advertised.

Each of these four methods, or any combination of them, may serve as the basis for a valid administrative determination that a particular low bidder is also the lowest responsible bidder. The choice of method to be used may be made by the legislature, or may be delegated to the governing body or chief administrative officer of the contracting agency.

Procedures for evaluating contractors' qualifications serve three major public interests, namely preventing or minimizing adverse consequences of contractor default or delay; maximizing the benefits of the competitive bidding system; and improving the quality of public construction work.

i. Prevention of Contractor Default or Delay.— Legislatures have sought to protect public investments in public works by requiring suretyship and indemnification provisions in all public works contracts. However, these efforts may not be enough to cover the costs that the public must bear. Bonding requirements generally protect public agencies from loss of funds invested directly in costs of preparation and construction of a project. But the indirect costs of the agency's added overhead expense and the public's added period of inconvenience cannot be recovered from the contractor's surety.

To some extent, public works agencies can minimize risks that contractors will overextend themselves by subdividing large contracts into segments, no one of which is likely to overtax the contractor to which it is awarded. However, in such situations a default or inexcusable delay inevitably affects not only the contractor directly involved, but also other contractors whose work schedules are planned with reference to the schedules of that contractor.

Public safety is also an important reason for insisting that construction contractors be qualified to perform according to contract standards and schedules. Moral, legal, and professional obligations call for transportation construction programs to provide safe and convenient facilities for public travel. Court decisions and statutes have eliminated or restricted some states' sovereign immunity from suits based on defects in design and workmanship. At the same time, statutory standards for safe working conditions in federal law apply to contractors on state construction projects using federal funds, and similar state laws apply to state-funded projects. Thus, competence to adhere to standards that protect the safety of the traveling public and of workers employed in construction activity is an important aspect of contractor qualification.

ii. Improvement of Competitive Bidding.—The competitive bidding system is intended to secure the highest quality work for the least cost. But it can do this only if individual bidders realistically analyze the requirements of a construction plan and make their proposals fully responsive to these requirements and to prevailing market conditions.

Reliance on market forces alone to eliminate those contractors who engage in irresponsible bidding is not practical. Mandatory qualification procedures are viewed by all segments of the construction industry as a means by which responsible contractors can promote the stability of the bidding process by assuring that bids will maintain a realistic relationship to sound engineering practices and market conditions.

Marvec Constr. Co. v. Township of Belleville, 254 N.J.
 Super. 282 603 A.2d 184, 187 (1992); City of Cape Coral v.
 Water Services of America, Inc., 567 So. 2d 510, 513, review denied, 577 So. 2d 1330 (Fla. App. 2 Dist. 1990); Tasco Dev. & Building Corp. v. Long, 212 Tenn. 96, 368 S.W.2d 65 (1963).

¹³ See, e.g., IDAHO CODE § 54-1910(a) (2001).

iii. Improvement of the Quality of Public Construction.—Early proponents of contractor licensing and prequalification systems argued that such a system would result in higher quality highway construction. Contractors would be required to submit to examination of their qualifications prior to announcement of contracts. Also, the system included classification of contractors for certain types of work that they had demonstrated the ability to handle. Bidding would then be confined to those contractors whose competence was established.¹⁴

New or out-of-state contractors interested in doing work for transportation agencies may be allowed to bid only on small and less complex projects until they acquire the experience and financial resources to assure successful performance on larger projects. However, most states allow contractors wide latitude in the types of contracting work for which they may qualify. States assign capacity ratings to contractors according to fixed formulas that are applied uniformly to all applicants.

b. The Legal Basis of Contractor Qualification Systems

Many states require that persons engaging in general or specialized engineering or construction work must obtain licenses based on satisfactory demonstration of their professional competence. In addition, contractors intending to compete for public contracts for highway construction must, in most states, establish their qualifications for performing such work prior to being allowed to file their bids. In states that do not require prequalification, contractors who are low bidders on public projects must be certified as responsible and qualified to receive the contract award under a "postqualification" procedure. In both pre- and postqualification, the applicant is required to submit records of finances, management, and past relevant experience. Qualification is then based on a rating derived from evaluation of this evidence.

A distinction must be made between the mechanism of licensing and the various forms of bidder qualification. Licensing is required to authorize individuals or corporations to engage in the business of construction contracting within a particular state. In contrast, prequalification and postqualification are methods of establishing a bidder's eligibility to bid on a public contract managed by a particular public agency, or to receive a particular contract as a result of competitive bidding. Licensing of contractors and certification under various qualification procedures must also be distinguished from that form of licensing that is in the nature of an occupational or privilege tax, which is chiefly for the production of tax revenue. ¹⁵

i. Limits On State Police Power Applied To Contractor Qualification.—As in the regulation of businesses, trades, and occupations generally, the authority for licensing and qualification of contractors dealing with the public is based on the state's police power. The states must, however, respect the supremacy of federal law where it applies, and refrain from imposing any limitations on Interstate commerce. Accordingly, federal regulations applying to federally-assisted highway projects declare that state procedures for qualification of contractors will not be approved by the Federal Highway Administrator if in his or her judgment they may operate to restrict competitive bidding.16 In addition to respecting the supremacy of federal laws, state contractor qualification requirements must avoid unfair discrimination among contractors, and must employ standards that are reasonably related to the legitimate objectives of the law.

Much of the early concern over possible discrimination is reflected in two Pennsylvania cases—Harris v. Philadelphia¹⁷ in 1930 and Corcoran v. Philadelphia in 1950.¹⁸ Both were taxpayers' suits to enjoin the application of municipal ordinances requiring prequalification of bidders on city public works projects. In Harris, the prequalification procedure was declared to be discriminatory; in Corcoran, the ordinance was sustained.

In *Harris*, the prequalification questionnaires were filed with the head of the municipal department that would supervise the performance of the contract, and if he was satisfied the prospective bidder's name was placed on a "white list" of "responsible bidders" entitled to submit bids without further inquiry. Others who were rejected by the department head were entitled to appeal his decision to a special board. In enjoining enforcement of this ordinance, the Supreme Court of Pennsylvania declared:

It is obvious that, even if this plan is, in some respects, an advance on the previous method, it nevertheless opens wide the door to possible favoritism. The awarding director can place upon the white list the name of any intending bidder whom he chooses to approve, however irresponsible in fact, and that decision is not reviewable. On the other hand, he may compel all bidders, who are not favorites of his, to go to the expense of an appeal to the board, which will have before it only the answers to the questionnaire by those the awarding director has excluded from bidding, with no way of knowing whether or not their plant, equipment, experience and financial standing are superior or inferior to those of the bidders whose names the director has placed on the white list. ¹⁹

Suggesting a way out of this danger, the court stated that prequalification might not be objectionable if all bidders' questionnaires were submitted to an independent committee having the expertise to properly analyze the evidence and advise on the classification and quali-

 $^{^{14}\,}See$ Netherton, supra note 1, at 1047.

¹⁵ See, e.g., WASH. REV. CODE § 18.27.030 (1999, 2003 Supp.)

¹⁶ 23 C.F.R. § 635.110(b) (Apr. 2002).

^{17 299} Pa. 473, 149 A.722 (1930).

¹⁸ 363 Pa. 606, 70 A.2d 621 (1950).

^{19 149} A. at 723-24.

fications of the applicants. It insisted, however, that all bidders must be treated equally in order to comply with the law.

Twenty years later, the Pennsylvania Supreme Court was asked to pass on another ordinance by which Philadelphia sought to require prequalification of bidders on municipal contracts. The court held that the city's prequalification requirements were entirely reasonable, and were applicable to all potential bidders without discrimination. Moreover, the court found no fault with the manner in which the system had been applied to the project advertised in this instance, and denied plaintiff's charge that the city had circumscribed the advertised project in such a way as to place it outside the scope of the work classification for which the plaintiff was certified.

c. Qualification of Contractors on Federal-Aid Highway Projects

A policy of protecting and encouraging competitive bidding for contracts to construct federal-aid highways is reflected in federal statutes and FHWA regulations. The basic mandate is the statutory requirement that federal-aid highway projects shall be performed by contracts awarded through competitive bidding, unless the Secretary of Transportation makes an affirmative finding that some other method better serves the public interest. Contracts shall be awarded only on the basis of the "lowest responsive bid submitted by a bidder meeting established criteria of responsibility."²¹ At the same time, the statute states:

No requirement or obligation shall be imposed as a condition precedent to the award of a contract to such bidder for a project, or to the Secretary's concurrence in the award of a contract to such bidder, unless such requirement or obligation is otherwise lawful and is specifically set forth in the advertised specifications.²²

The FHWA regulations require federal approval of any state prequalification requirements that will be applied in a federal-aid project.²³ The regulations further provide that there shall be no approval of qualification procedures that operate to restrict competition or prevent submission or consideration of bids by any responsible contractor.²⁴ "No contractor shall be required by law, regulation, or practice to obtain a license" before it may submit in a federal-aid project bid or have that bid considered.²⁵ As a result, some states exempt federally-funded transportation construction contracts from their state licensing requirement.²⁶ However, this prohibition does not prevent states from requiring the successful bidder to obtain a business or professional li-

cense upon the award of a contract.²⁷ This rule is based in part on the constitutional doctrine that states may not subject nonresident contractors to requirements that impede their bidding and so create a barrier to Interstate commerce. However, it also reflects the practical consideration that licensing serves no purpose in the bidding phase of a public works project. Federal regulations permit states to apply this requirement to both resident and nonresident contractors bidding on federal-aid highway projects.²⁸

Federal regulations also require that states must allow sufficient time between the call for bids and the opening of bids.²⁹ This allows all potential bidders an opportunity to be prequalified after a full and appropriate evaluation of the contractor's experience, personnel, equipment, financial resources, and performance record.

In recognition of federal regulations designed to foster competition, and of the fact that contractors on federal-aid highway construction projects are everywhere subject to prequalification or postqualification requirements, states may accord special status to federal-aid highway contracts under their licensing laws. Idaho's Public Works Contractors License Act, for example, states:

It shall be unlawful for any person to engage in the business or act in the capacity of a public works contractor within the state without first obtaining and having a license. . . . No contractor shall be required to have a license under this act in order to submit a bid or proposal for contracts for public works financed in whole or in part by federal aid funds, but at or prior to the award and execution of any such contract by the state of Idaho, or any other contracting authority mentioned in this act, the successful bidder shall secure a license as provided in this act. ³⁰

Although federal policy thus encourages the fullest possible competition for federal-aid contracts and prohibits states from imposing licensing or prequalification requirements that might serve to exclude responsible contractors from out of state, federal policy also expects contractors on federal-aid projects to be responsible firms and seeks to keep federal-aid funding from going to non-responsible firms that have engaged in serious criminal conduct or other non-responsible actions.³¹

²⁰ 70 A.2d at 623.

 $^{^{21}}$ 23 U.S.C. \S 112 (2001).

 $^{^{22}}$ 23 U.S.C. § 112(b)(1) (2001).

²³ 23 C.F.R. § 635.110(a) (Apr. 1, 2002).

 $^{^{24}}$ *Id*.

 $^{^{25}}$ 23 C.F.R. \S 635.110(c).

²⁶ MISS. CODE § 31-3-1(c) (2000).

²⁷ 23 C.F.R. § 635.110(c); see also 29 DEL. CODE § 6923(d) (contractor is required to have Delaware business license prior to execution of public works contract); Thompson Elects. Co. v. Easter Owens/Integrated Systems, Inc., 702 N.E.2d 1016, 1020, 301 Ill. App. 3d 203, 234 Ill. Dec. 362 (Ill. App. 1998) (county did not abuse its discretion in accepting lowest bid even though bidder was not licensed in the state; decision was based on bidder's experience, its prequalification approval, and the fact that the bid specifications did not require a license prior to contract execution).

²⁸ 23 C.F.R. § 635.110(a) (Apr. 1, 2002).

²⁹ 23 C.F.R. § 635.110(c) (Apr. 1, 2002).

³⁰ IDAHO CODE § 54-1902 (2000, 2002 Supp.).

³¹ This portion of this volume is drawn from a publication prepared by the authors of the 2011 update to this current

Accordingly, the qualification of contractors for federalaid highway projects is subject to federal legislation and to federal regulations revised significantly in 2008, which concern the suspension and debarment of contractors and subcontractors from federal-aid transportation projects by the USDOT, as discussed in Section 2(B)(1) of this volume.³²

The enactment of the ARRA,³³ and the Fraud Enforcement and Recovery Act of 2009 (FERA),³⁴ has had a significant impact in this area. ARRA provided approximately \$50 billion in funding for transportation capital projects, as part of a broader \$500-billion economic stimulus package, and provided certain safeguards to protect that funding as described below. In addition to amending the Federal False Claims Act, FERA strengthened certain other safeguards in federal law, and provided \$245 million in additional funding to support investigative and enforcement efforts.

ARRA established a Recovery Accountability and Transparency Board to oversee the use of federal stimulus funding. It reviews and audits ARRA-funded programs and projects, refers potential abuses to the Inspectors General of USDOT and other federal agencies for investigation, and offers recommendations to agencies, the President and Congress on measures to prevent waste, fraud, and abuse. ARRA also provides whistleblower protection for employees of state and local governments and contractors.

The enactment of ARRA and FERA also led the USDOT Office of Inspector General (OIG) to conduct a further review of USDOT's suspension and debarment program beyond the revisions to that program made by the rulemaking in 2008. In May 2009, OIG issued an ARRA Advisory concerning the suspension and debarment program,³⁵ and in January 2010 OIG issued a more detailed audit report on that program.³⁶ These

volume; ERIC KERNESS & PETER SHAWHAN, IDENTIFICATION, PREVENTION, AND REMEDIES FOR FALSE CLAIMS IN HIGHWAY IMPROVEMENT CONTRACTING (NCHRP Legal Research Digest 55, Transportation Research Board, 2011); available at http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_lrd_55.pdf, last accessed on Nov. 26, 2011.

reviews considered ways to strengthen the program's effectiveness, as discussed further in Section 2(B)(1) of this volume.

While state DOTs operate under their own state statutory authority to award state contracts, the award of a federal-aid highway or bridge contract requires FHWA concurrence in order to maintain continued eligibility for the federal-aid funding for such a contract. If a state DOT selects a contractor for a federal-aid contract who has been suspended or debarred by USDOT, the state DOT may not be able to obtain FHWA concurrence in the award of the contract or if it obtains such concurrence without FHWA officials being aware of the involvement of a suspended or debarred firm, it may later face FHWA withdrawal of federal-aid funding after the project is already underway. This gives state DOT officials strong reasons for ensuring that their state processes for contractor qualification take USDOT suspensions and debarments into account.

The USDOT OIG has played, and continues to play, an important role in the implementation of other fraudprevention measures under ARRA and FERA. The OIG works with FHWA, other USDOT units, and with state and local stakeholders to combat fraud, waste, and abuse affecting federal-aid highway and bridge programs. The OIG is mandated by law to conduct audits and investigations to prevent and detect waste, fraud, and abuse affecting USDOT programs.37 USDOT's Inspector General is one of the members of the Federal Recovery Accountability and Transparency Board established pursuant to ARRA.38 The USDOT OIG has also been strengthened by FERA, which significantly strengthened the Federal False Claims Act (FCA) and also gave federal investigators and prosecutors "significant new criminal and civil tools to assist in holding accountable those who have committed financial fraud."39

Acting in coordination with FHWA and other agencies as appropriate, the USDOT OIG embarked on a series of initiatives flowing from ARRA and FERA. The OIG's goals focused on maintaining oversight over USDOT's implementation of ARRA programs, including new tracking and reporting requirements; conducting proactive and reactive grant fraud investigations involving ARRA-funded programs and projects; conducting investigations of collusive price fixing, of false

 $^{^{32}}$ See 31 U.S.C. \S 6101 Note; see also 73 Fed. Reg. 24,139 (May 2, 2008), repealing 49 C.F.R. pt. 29 and adopting a new 2 C.F.R. pt. 1200.

 $^{^{33}}$ American Recovery and Reinvestment Act of 2008, Pub. L. No. 111-5, 123 Stat. 115 (2009).

³⁴ Fraud Enforcement and Recovery Act of 2009, Pub. L. No. 111-21, 123 Stat 1617 (2009) (FERA); text available at http://www.gpo.gov/fdsys/pkg/PLAW-111publ21/pdf/PLAW-111publ21.pdf (last accessed July 26, 2012).

³⁵ USDOT OIG, Advisory No. AA-2009-01, ARRA Advisory–DOT's Suspension and Debarment Program, May 18, 2009, available at

http://www.oig.dot.gov/sites/dot/files/pdfdocs/Final_DOT_ARRA _Advisory_05-18-09_.pdf (last accessed on July 26, 2012).

³⁶ See USDOT OIG Report No. ZA-2010-034, Final Report on the Department of Transportation's Suspension and Debarment Program, Jan. 7, 2010, available at http://www.oig.dot.gov/library-item/5255 (last accessed on June 11, 2010).

 $^{^{37}}$ Inspector Generals Act of 1978 as amended by the Inspector General Reform Act of 2008, Pub. L. No. 110-409, 122 Stat. 4302 (2008); available at

 $[\]label{lem:http://www.ignet.gov/pande/leg/pl110-409.htm} $$ (last accessed June 12, 2010).$

 $^{^{38}}$ See The Recovery Accountability and Transparency Board.

http://www.recovery.gov/About/board/Pages/TheBoard.aspx and related links (last accessed on June 11, 2010).

³⁹ Press Release, White House Office of Communications, Statement of the President, May 20, 2009; available at http://www.whitehouse.gov/the-press-office/reforms-american-homeowners-and-consumers-president-obama-signs-helping-families-sa (last accessed June 12, 2010).

claims involving labor and materials, and of bribery of public officials; and promoting joint efforts with USDOT units and state and local stakeholders to combat fraud, waste, and abuse.⁴⁰

The OIG also conducted fraud prevention awareness training and other outreach activities to inform USDOT staff, state DOTs, and others at all levels of government about how to recognize, prevent, and report suspected fraud.41 The USDOT OIG has, among other things, prepared a training video on False Statements and Claims to provide government officials and members of the public with an understanding of common fraud schemes and to strengthen collaborative efforts aimed at prevention and detection of such schemes. This video is potentially useful for any federal, state, or municipal transportation officials.42 As of January 31, 2010, the OIG had provided 168 training sessions for more than 11,000 individuals nationwide, including officials from FHWA regional offices, state DOTs, and other public agencies. As of January 31, 2010, OIG had also received 184 complaints and accepted 16 for prosecution.⁴³ The OIG continues to monitor fraudulent schemes in the contracting process and to issue audit reports concerning various administrative practices, develop work plans, and conduct outreach to various state DOTs and public authorities.44

In addition, the USDOT OIG, the Federal Recovery Accountability and Transparency Board, the Antitrust Division of the U.S. Department of Justice (DOJ), and the U.S. Government Accountability Office (GAO) have undertaken initiatives to combat waste, fraud, and abuse potentially affecting federal-aid highway and bridge projects following the enactment of ARRA and FERA. Such measures go beyond the scope of a discus-

 40 See the USDOT OIG's Strategic Plan dated Sept. 2009, available at

sion of qualification of bidders for federal-aid contracts, but are discussed in other publications. 45

Beyond the statutory safeguards provided by ARRA and FERA and agency initiatives undertaken pursuant to them, the FARs were amended in 2008 to add new requirements for contractors and consultants dealing with federal agencies. ⁴⁶ It should be noted that the 2008 FAR amendments apply only to direct contracting by federal agencies, and do not apply to grant recipients. Thus, they do not apply to federally-funded state highway contracts on federal-aid projects. They are instructive, however, with regard to ethics and disclosure requirements which the DOJ and Congress consider necessary to protect federal contracting from fraud.

The impetus for the FAR amendments came both from DOJ and from enactment of federal legislation, the Close the Contractor Fraud Loophole Act. 47 The 2008 FCA amendments require that every covered federal contractor adopt a written Code of Business Ethics and Awareness within 30 days after receiving the award of a federal agency contract and make that Code available to each of their employees. The 2008 FCA amendments also require that every contractor receiving a federal agency contract of more than \$5 million, and major subcontractors on such contracts, make timely disclosure to the agency OIG, in connection with the award, performance, or closeout of a government contract by the contractor or subcontractor, whenever the contractor has credible evidence that a principal, employee, agent, or subcontractor has committed a violation of federal criminal law involving fraud, conflict of interest, bribery or gratuity, criminal or civil violation of the FCA, or receipt of a significant overpayment on the contract. The disclosure requirement includes an ongoing obligation to disclose any newly discovered information up to 3 years after the closeout of the contract. Note that a conviction, indictment, investigation, or conclusive proof is not required to trigger the disclosure requirement. The firm merely has to have "credible evidence" indicating that an associated person or firm has committed criminal conduct.48 Under the 2008 FCA amendments, failure to make such mandatory disclosures contitutes grounds for federal suspension and/or debarment.

2. Prequalification of Contractors for Performance-Based Construction

The traditional process of developing and performing highway and bridge projects is usually conceived of as having three main phases. A state or municipal DOT or other public owner identifies a need for a transportation project, obtains public funding for the project, and conducts a planning and environmental review process,

http://www.oig.dot.gov/sites/dot/files/OIG_Strategic_Plan_2009 _508.pdf (last accessed June 10, 2010).

⁴¹ See, e.g., http://www.oig.dot.gov/oig-recovery-training (last accessed on June 10, 2010), including a detailed USDOT OIG PowerPoint training presentation, Fraud Awareness and Prevention, available at

http://www.oig.dot.gov/sites/dot/files/Website_2009_ARRA_OIG_General_Presentation.pdf (last accessed on June 10, 2010).

⁴² USDOT OIG, False Statements and Claims Video, available at http://www.preventtransportationfraud.org/false statementvideo.html (last accessed on June 22, 2010).

⁴³ See USDOT OIG Recovery Act Monthly Report for January 2010, available online at http://www.oig.dot.gov/sites/dot/files/DOT%20OIG%20Monthly %20Report%20Num%2011%20January%202010%2002-05-10.pdf.

⁴⁴ *Id.* The USDOT OIG and the American Association of State Highway and Transportation Officials (AASHTO) held a Sixth Annual National Fraud Awareness Conference on Transportation Infrastructure Programs in Arlington, Va., from July 26 through 29, 2010; for further information, see http://www.preventtransportationfraud.org/ (last accessed on June 22, 2010).

⁴⁵ See Kerness & Shawhan, supra note 31.

⁴⁶ 48 C.F.R. § 52.203.13

⁴⁷ Pub. L. No. 110-252, tit. VI, ch. 1, 122 Stat. 2323 (2008).

 $^{^{48}}$ 48 C.F.R. §§ 3.1003, 9.406-2(b)(vi), 9.407-2(a)(8), and 52.203.13.

which identifies a preferred alternative approach to the project. The DOT then either assigns in-house engineering staff, or retains an engineering firm as a consultant, to prepare detailed engineering designs for the project, with the personnel preparing, reviewing, and approving the engineering design for the project having to meet state licensing requirements for the practice of engineering as a profession. Finally, when the engineering plans are complete and funding is in place, the DOT lets a construction contract to the lowest responsible bidder, with bidders either being reviewed in advance before being allowed to bid (prequalification) or being reviewed after bidding and rejected only if they are determined non-responsible (postqualification). The DOT then inspects the construction work on an ongoing basis, either through in-house construction inspectors or construction inspection consultants, to assure that the contractor complies with the minimum quality standards established by the DOT's standard specifications.

While the traditional system has advantages, it also has disadvantages that become increasingly evident over time. It is relatively slow to deliver a completed project, because no construction work can be undertaken until all engineering design work has been completed. It does not, for example, allow for fast-tracking projects by allowing construction to begin while later stages of the project are still being designed. It does little, if anything, to foster teamwork between designers and construction contractors, because they are generally entirely separate businesses engaged in different lines of work and performing their respective functions at different times during the life cycle of a project.

One consequence of this is that design engineers often fail to obtain sufficient information about constructability issues from interacting with contractors who have field experience. As a result, some designers may on occasion produce designs that look good on paper and in theory, but prove to be more difficult, timeconsuming, and expensive than necessary for contractors to build in the field.

Another consequence of this is that, if contractors encounter unanticipated site conditions, advanced deterioration of existing structures, or constructability problems, construction work may need to stop for weeks at a time while a team of design engineers, who had previously completed their work designing the project and had moved on to other things, are reassembled in order to analyze the problem and design a solution, with the public forced to cope with traffic congestion, the parties potentially incurring financial losses, and the DOT facing a number of dissatisfied parties in the meantime.

In addition, the authors note that although the prequalification and postqualification systems may weed out firms that have been convicted of criminal conduct or lack sufficient financial capacity or technical capability to perform the project, they do little beyond that to improve the quality of construction beyond meeting the specifications set by owners. Aside from contracts that may include incentive/disincentive clauses, cost-plustime bidding, or quality incentives, they do little to identify or reward construction contractors who demonstrate quality in performance by building projects on time, within budget, safely, and with a cooperative attitude toward the public owner and members of the public affected by the project. If anything, the traditional prequalification and postqualification systems may involve a risk of generating perverse incentives, in which firms could gain cost advantages by cutting corners on quality of materials and equipment, employing inexperienced personnel willing to work for lower wages, not meeting contract specifications, and disregarding construction safety practices, and use cost advantages obtained through such practices to underbid higherquality construction firms. Such contractors might increase administrative costs for public owners by requiring closer supervision through construction inspection. There might also be a risk that the projects built by such contractors might have higher maintenance costs following completion as problems resulting from inferior work practices develop over time.

The current trend toward innovative forms of project management, such as design-build (DB) and construction manager at risk (CMR), basically represents efforts to devise structural solutions to some of these difficulties. Both DB and CMR are intended to allow for fasttracking of projects by allowing construction to begin while the design of later stages of the projects is still underway. Both DB and CMR are intended to provide for closer cooperation and teamwork between design engineers and construction contractors, so that project designs take constructability considerations into account and engineers remain part of the project team and available on an ongoing basis to help devise prompt solutions to unanticipated problems encountered by construction contractors in the field, thus minimizing construction downtime and project delays. Both DB and CMR are, in theory at least, also intended to help DOTs and other public owners reduce administrative costs by having DB or CMR firms take on greater responsibility for quality control and warranty commitments so that DOTs can reduce costs associated with construction inspection.

Unless DOTs and other public owners can select DB or CMR firms with an established record of proven performance and high quality, however, the DB and CMR approaches involve increased risks. If a DOT entrusts quality-control functions to a DB or CMR firm and reduces or eliminates construction inspection efforts in reliance upon expectations of quality, and if the DB or CMR firm abuses that trust, then both the DOT and the traveling public may face consequences in terms of poor-quality transportation facilities, growing maintenance problems, and lack of adequate means to hold contractors accountable for dealing with postconstruction problems. The traditional prequalification and postqualification approaches do not focus on selecting contractors who deliver the highest-quality results.

Solving such problems necessarily involves developing a system for evaluation and selection of contractors that identifies and places a value on contractors capable of performing quality work without constant and close supervision, and capable of performing a project on time, within budget, and with minimal delays resulting from problems encountered in the field. This type of system will involve ongoing evaluation and rating of the quality of contractors' work over time, and will factor the rated quality of contractors' performance into the weighting of bids or the evaluation of proposals submitted through a competitive RFP process. Such a system can no longer continue to rely on the existing postqualification or prequalification systems without significant change.

The Transportation Research Board (TRB) and NCHRP have devoted attention to this issue. In 2009, TRB published a synthesis, Performance-Based Construction Contractor Prequalification, 49 which evaluates this issue through a detailed examination of contractor prequalification policies and procedures, contractor performance evaluations, barriers to implementation, and prequalification case studies, and offers both conclusions and recommendations for further research. It focuses on identifying contractor performance-based prequalification practices based on construction quality, timely performance, safety record, and other criteria, with an effort to identify systems that effectively furnish incentives for good contractor performance.⁵⁰ The study indicates that two guiding principles for evaluating such systems is whether such systems add value to projects by reducing performance risk and whether the elements of such systems are justifiable and defensible.51

The study defines performance-based prequalification as:

A set of practices and backup documents that must be followed by a construction contractor to qualify to submit a bid on a construction project based on quality, past performance, safety, specialized technical capability, project-specific work experience, key personnel, and other factors. This information may be provided on a project-by-project basis or on a specified periodic basis.

It would go beyond the scope of the current volume to discuss in detail the research findings and syntheses of practice offered in the study. For state and municipal DOT officials responsible for efforts to develop improved project delivery systems for the future, careful and thorough consideration of this study and its findings would appear to be warranted. A few of the study's conclusions may be summarized briefly, however.

a. Dependence Upon Selection of Well-Qualified Contractors

The authors of NCHRP Synthesis 390 recommend that highway construction agencies begin the process of transitioning to performance-based prequalification rather than continuing to rely on existing administrative prequalification or postqualification systems. They take the view that the bonding of construction contractors is associated more with administrative prequalification than with performance-based prequalification, and question what value performance-bonding adds to construction projects. They recommend that DOTs simplify the performance-based pregualification process, focusing on major rather than minor performance evaluation criteria, and seek to develop nationwide standardization of the information required by DOTs for performance-based prequalification. They suggest that both bidding and bonding capacity could be adjusted through a performance-based prequalification system, with performance-bonding requirements lowered for contractors with proven track records of highquality performance. They suggest the use of a threetier performance-based prequalification system, with the first tier including evaluation of the contractor's bonding capacity, the second tier involving a contractor performance-evaluation system based on specified factors, and the third tier involving project-specific prequalification of contractors for selected projects, in which agencies concluded that this would add value to the contractor-selection process for a given project.⁵²

b. Contractor Prequalification Policies and Procedures

The authors of the NCHRP study examined state DOT approaches to contractor prequalification policies and procedures.⁵³ The authors found that 35 state DOTs had pregualification requirements. Of those, 29 required pregualification for all projects, and 6 required it only for selected projects. In addition, 21 applied the same pregualification criteria to all projects, whereas 14 applied prequalification criteria, which differed according to the monetary size, technical complexity, delivery method, technical content, or other characteristics of the contracts involved. Those figures changed somewhat when the prequalification requirements were performance-based. Of the states having performancebased pregualification procedures, 7 required pregualification for all projects while 11 required it for selected projects only. Four applied the same prequalification criteria to all projects, while 9 applied criteria that differed depending on the characteristics of the projects and contracts involved.⁵⁴ Analyzing the various prequalification forms in use by state DOTs, the authors of the NCHRP study identified 10 factors, falling into

⁴⁹ Douglas D. Gransberg and Caleb Riemer, *Performance-Based Construction Contractor Prequalification*, A Synthesis of Highway Practice, NCHRP Synthesis 390, TRB, The National Academies, Washington, D.C., 2009; available at http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_syn_390.pdf, last accessed on January 3, 2012.

⁵⁰ *Id*. at 3.

⁵¹ *Id*. at 5.

⁵² *Id.* at 54 to 60.

 $^{^{53}\,} Id.$ at Chapter Two, pp. 15 et seq.

 $^{^{54}}$ Id. at 16-17; see esp. table 5 and figures 6 and 7.

three broad categories, included in the majority of such forms. These were: 55

- Financial criteria—type of business (publicly or privately owned), and financial statement.
- Managerial criteria—key personnel experience, major convictions for bidding or contract crimes or fraud, business connections, and any prior project defaults or other failures.
- Performance criteria—work classifications, construction experience, major project experience, and available equipment.

More than half of the state DOTs using performance-based prequalification procedures focused on eight particular criteria when making their prequalification determinations. The three most frequently cited factors were major project experience, technical ability, and past illegal behavior. The other five common factors included key personnel experience, available equipment, quality and workmanship, managerial ability, and financial capability.⁵⁶

c. Contractor Performance Evaluations vs. Bonding and Bonding Capacity

Going beyond general prequalification criteria, the authors of the NCHRP study examined more closely what things state DOTs considered important in establishing credible contractor performance evaluation processes, and what particular criteria agencies focused on in rating contractor performance. The study found that, to establish credible processes, agencies focused on assuring the accuracy, fairness, and consistency of evaluations of contractor performance, and on establishing a retention period for such evaluations that was sufficiently long to be useful, but that still allowed marginal contractors who worked on improving their performance to have the opportunity for such improvements to be reflected in their current evaluations.⁵⁷ The study's authors reviewed the factors considered by agencies in rating performance, and identified 17 factors typically considered by the state evaluation systems. The 10 factors most frequently used by DOTs in such evaluations were:58

- Timely project completion.
- Coordination and cooperation with the agency.
- Timely and complete submittals of documentation.
- Environmental compliance.
- Conformance with contract documents.
- QA program effectiveness.
- Proper maintenance and protection of traffic.
- Safety program effectiveness.
- Impacts to the traveling public.
- DBE utilization.

Additional factors often considered in performance evaluations included coordination and cooperation with property owners, level of effort displayed on the job, coordination and cooperation with third-party stakeholders, timely punchlist completion; mitigation of time overruns, mitigation of cost overruns, and responsiveness to warranty call-backs.

d. State DOT Experiences

To consider how difficult it might be for state DOTs or other agencies to implement performance-based prequalification and how performance-based pregualification was working out in actual practice for those agencies that had already implemented it, the authors of the NCHRP study considered actual and potential barriers to implementation⁵⁹ and selected three agencies for case studies. 60 Of barriers to implementation, those considered to have the greatest significance included ensuring that agency evaluators were qualified, assuring that agency rules governing the process were transparent and logical, the potential impact of agency performance ratings on contractors' bonding capacity, and the legal implications of performance evaluations. A variety of other barriers were, however, also noted by state DOTs and contractors, and discussed by the authors of the study. 61 In selecting agencies for case studies, the authors sought agencies that had adopted objective contractor performance evaluation systems that supported their prequalification processes in a meaningful way and had adopted specific processes that not only used the performance evaluation output to reward contractors with a good record, but also encouraged contractors with a poor record to improve. Based on these considerations, the authors chose Michigan DOT, FDOT, and the Ontario Ministry of Transportation for case studies. Although these agencies' procedures and experiences varied somewhat, the case studies revealed that all three agencies included consideration of the following factors in their systems:62

- Contractors' financial capability.
- Contractors' calculated capacity factors from their financials.
 - Detailed financial analyses.
 - Contractors' equipment and plant resources.
 - Performance evaluations.
 - Past project experience.

Those interested in a closer examination of how these three agencies approached evaluating the performance of contractors, and what experiences they had in doing so, will find detailed case study evaluations of each in the NCHRP study.⁶³

 $^{^{55}}$ *Id.* at 17–19.

 $^{^{56}}$ Id. at 21–23; see esp. figure 12.

⁵⁷ Id. at 26-28.

 $^{^{58}}$ *Id.* at 29–30, see esp. figure 19.

⁵⁹ Id. at ch. 4, at 37-40.

⁶⁰ Id. at ch. 5, at 41-53.

⁶¹ Id. at 37-40.

 $^{^{62}}$ Id. at 41–43.

 $^{^{63}}$ $\emph{Id}.$ at 43–44 (Michigan DOT), 44–48 (Florida DOT), and 48–51 (Ontario MOT).