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TESTIMONY

TO: SENATE TRANSPORTATION

**FROM: SCOTT HEIDNER
EXECUTIVE DIRECTOR, AMERICAN COUNCIL OF ENGINEERING
COMPANIES OF KANSAS (ACEC KANSAS)**

RE: A&M TRANSPORTATION RECOMMENDATIONS 1 & 3

DATE: MARCH 15, 2016

Mr. Chairman and members of the committee: Thank you for the opportunity to appear today. My name is Scott Heidner, and I am here today in my role as Executive Director for the American Council of Engineering Companies of Kansas (ACEC Kansas). ACEC Kansas is the trade association representing private consulting engineering businesses in Kansas.

We are here in opposition to recommendations one and three of the Transportation section of the Alvarez & Marsal (A&M) report. We offer no comment today to the rest of the recommendations under the Transportation section. We recognize this was a good faith effort to find efficiencies and responsible cost savings, and while we take exception with two of the specific recommendations, we applaud the effort and the mindset behind it.

One of the actions under recommendation #1 involves separating from the Federal Highway Administration (FHWA) procurement laws where possible. This is the only part of recommendation number one we are addressing. Even more specifically, we are only addressing the recommendation to move away from the current Qualifications Based Selection (QBS) process, not the corollary changes regarding Davis Bacon or design/environmental standards.

QBS is required by the federal government and is codified in state law in almost every state in the union. This is because QBS has clearly been shown to provide the best *value* to the taxpayer.

Many other services, including construction, are procured using a lowest responsive bidder system. This system has served the taxpayers of Kansas well for many years. So why not consider moving towards such a system for the procurement of

professional design services? The answer revolves entirely around the scope of services.

When a contractor is asked to respond to a request for proposal, that contractor has a set of design plans that spell out in fine detail the scope of services that goes into the project. Everything from the thickness of the asphalt, the width of the lanes, the materials to be used, etc. etc. Knowing the scope of the work in this much detail makes it possible for the contractor to estimate a cost upfront, and identifies *how* the project is going to be built.

When an engineer receives a request for qualifications, the project is literally in its infancy, and the entire scope of work provided to the engineer may not be more than a few paragraphs outlining the project in broad terms. It has not yet been decided *how* to design and construct this project. Why not? Because the State of Kansas needs and wants engineering firms competing for the project to bring a variety of options to the table. This is where engineering firms provide the most value. An engineering firm does not know, and should not decide, how to approach the design of a project until they have had an opportunity to sit down with the client, ask all the questions necessary, and bring a variety of options to the client to explore which one best fits the client's needs. If an engineer is asked to submit a price upfront, before asking these questions and having these conversations with the owner, the engineer will be forced to pick a method for designing the project without input from the owner. The engineer will also almost certainly submit the cheapest method possible to design the project, as the price of the design will determine whether or not they get the work. This does not serve the state well. There are times when the cheapest functional design may be exactly what the state needs. Most often, it is not.

Would taking the lowest bid from designer's result in "savings" to the state? If you only look at the cost of design fees, it probably would. However, moving away from QBS has shown time and again that it results in more change orders through the construction process and higher costs in preservation and maintenance over the life of the project. When total project costs are considered, including design, construction, and maintenance over the life of the project, design costs are usually at or below 1% of total project cost. But shortcomings in design will manifest themselves throughout the project, and those costs will dwarf any possible savings on initial design fees.

It is important to note that the opinions above are not shared just by the consulting engineering community, which may be perceived as profiting from them. The American Public Works Association (APWA), whose membership's sole job is



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providing the best value to the taxpayer and has no personal financial interest in the procuring of design services, is a strong and public proponent of QBS. (Attachment 1) The belief that QBS provides the best value to the taxpayer is almost universally held by those with understanding of the design and construction process. Perhaps most importantly, KDOT has used QBS for decades and never felt they received anything less than the best value for the Kansas taxpayer. You have fantastic leadership at KDOT, and I would encourage you to consider their judgment when evaluating this recommendation.

It is worth noting that the A&M study lists five states that do not have QBS statutes currently in place. Our research indicates this is incorrect. I have attached a document (Attachment 2) that shows QBS statutes currently in place in four of those five states. The fifth state, Iowa, does not have a QBS statute in place, but chooses to use QBS nonetheless. I have also attached a document cosponsored by the Iowa Department of Transportation advocating the use of QBS. (Attachment 3)

We also stand in opposition to recommendation #3 under the Transportation section, which suggests adding 20 additional design staff at KDOT as opposed to outsourcing that work to the private sector. We strongly dispute the cost estimates shown in the study and the assertion that the work can be done cheaper and more efficiently by the public sector than the private sector. A recent study done by New York University (Attachment 4) reached just the opposite conclusion, as have most other studies.

It is important to note that ACEC does not offer blanket opposition to the hiring of any additional staff at KDOT. We have a great partnership with KDOT, and a great amount of faith that Secretary King and Deputy Secretary Younger know what the appropriate staffing level should be. If they believe they need to hire certain engineers for certain positions, we are very inclined to trust their judgment. While we believe the private sector is best suited to provide the bulk of design services for the state, we recognize the need for a pipeline of talent to keep an appropriate amount of expertise on staff and to ensure KDOT is able to fill senior positions when they come open. We support their efforts to do so. The reductions in staffing numbers at KDOT in recent years reflect their serious deliberation about appropriate FTE counts and their trust in the work of the private sector.

However, the notion of creating 20 new FTEs at KDOT for the purpose of taking that work back from the private sector, especially under the auspice of getting a better product at a lower cost, is an unnecessary and prescriptive approach to staffing, as well as being statistically inaccurate.



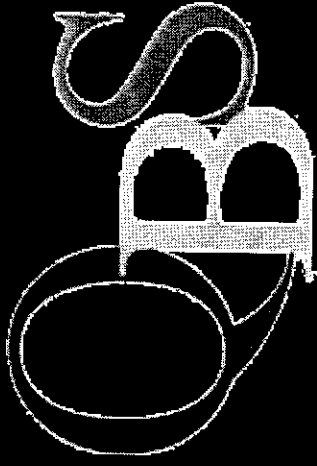
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In short, we trust KDOT leadership to know the appropriate staffing levels and would encourage you to show the same faith by not adopting an unfounded mandate of 20 additional FTEs. The private sector remains ready to provide outstanding innovation and service while absorbing the ups and downs in the volume of work available at any certain time. The responsibility for maintaining payroll through these ups and downs remains with the private sector and not the taxpayers of Kansas.

Thank you for your time today. I would be glad to stand for questions at the appropriate time.

ATTACHMENT

1



APWA POLICY STATEMENT

The American Public Works Association believes that the public interest is best served when governmental agencies select architects, engineers, and related professional services and technical consultants for projects and studies through Qualifications Based Selection (QBS) procedures. Basing selections on qualifications and competence, rather than price, fosters greater creativity and flexibility, and minimizes the potential for disputes and litigation.

ATTACHMENT

2

TEXAS

Sec. 2254.003. SELECTION OF PROVIDER; FEES. (a) A governmental entity may not select a provider of professional services or a group or association of providers or award a contract for the services on the basis of competitive bids submitted for the contract or for the services, but shall make the selection and award:

- (1) on the basis of demonstrated competence and qualifications to perform the services; and
 - (2) for a fair and reasonable price.
- (b) The professional fees under the contract may not exceed any maximum provided by law.

In fact, Board of PEs has statutory authority to enforce that and they have a rule that says an engineer cannot submit price or “anything from which cost may be derived.” Rules below.

§137.53 Engineer Standards of Compliance with Professional Services Procurement Act

(a) A licensed engineer shall not submit or request, orally or in writing, a competitive bid to perform professional engineering services for a governmental entity unless specifically authorized by state law and shall report to the board any requests from governmental entities and/or their representatives that request a bid or cost and/or pricing information or any other information from which pricing or cost can be derived prior to selection based on demonstrated competence and qualifications to perform the services.

(b) For the purposes of this section, competitive bidding to perform engineering services includes, but is not limited to, the submission of any monetary cost information in the initial step of selecting qualified engineers. Cost information or other information from which cost can be derived must not be submitted until the second step of negotiating a contract at a fair and reasonable cost.

(c) This section does not prohibit competitive bidding in the private sector.

NEVADA

NRS 625.530 Restrictions upon public works; preferences for contracts. Except as otherwise provided in NRS 338.1711 to 338.173, inclusive, and 408.3875 to 408.3887, inclusive:

1. The State of Nevada or any of its political subdivisions, including a county, city or town, shall not engage in any public work requiring the practice of professional engineering or land surveying, unless the maps, plans, specifications, reports and estimates have been prepared by, and the work executed under the supervision of, a professional engineer, professional land surveyor or registered architect.

2. The provisions of this section do not:

(a) Apply to any public work wherein the expenditure for the complete project of which the work is a part does not exceed \$35,000.

(b) Include any maintenance work undertaken by the State of Nevada or its political subdivisions.

(c) Authorize a professional engineer, registered architect or professional land surveyor to practice in violation of any of the provisions of this chapter or chapter 623 of NRS.

(d) Require the services of an architect registered pursuant to the provisions of chapter 623 of NRS for the erection of buildings or structures manufactured in an industrial plant, if those buildings or structures meet the requirements of local building codes of the jurisdiction in which they are being erected.

3. The selection of a professional engineer, professional land surveyor or registered architect to perform services pursuant to subsection 1 must be made on the basis of the competence and

qualifications of the engineer, land surveyor or architect for the type of services to be performed and not on the basis of competitive fees. If, after selection of the engineer, land surveyor or architect, an agreement upon a fair and reasonable fee cannot be reached with him or her, the public agency may terminate negotiations and select another engineer, land surveyor or architect. Except as otherwise provided in this subsection, in assigning the relative weight to each factor for selecting a professional engineer, professional land surveyor or registered architect pursuant to this subsection, the public agency shall assign, without limitation, a relative weight of 5 percent to the possession of a certificate of eligibility to receive a preference when competing for public works. If any federal statute or regulation precludes the granting of federal assistance or reduces the amount of that assistance for a particular public work because of the provisions of this subsection relating to a preference when competing for public works, those provisions of this subsection do not apply insofar as their application would preclude or reduce federal assistance for that public work.

[12a:198:1919; added 1947, 797; A 1949, 639; 1943 NCL § 2875.06a]—(NRS A 1967, 953; 1971, 774; 1973, 1700; 1975, 208; 1977, 320; 1983, 807; 1989, 788; 1997, 1055; 1999, 3489; 2001, 2022; 2003, 119; 2011, 3707)

NEW MEXICO

According to Statute **§13-1-120. Competitive sealed qualifications-based proposals; architects; engineers; landscape architects; surveyors; selection process.**

B. The appropriate selection committee shall select, ranked in the order of their qualifications, no less than three businesses deemed to be the most highly qualified to perform the required services, after considering the following criteria together with any criteria, **except price**, established by the using agency authorizing the project:

- (1) specialized design and technical competence of the business, including a joint venture or association, regarding the type of services required;
- (2) capacity and capability of the business, including any consultants, their representatives, qualifications and locations, to perform the work, including any specialized services, within the time limitations;
- (3) past record of performance on contracts with government agencies or private industry with respect to such factors as control of costs, quality of work and ability to meet schedules;
- (4) proximity to or familiarity with the area in which the project is located;
- (5) the amount of design work that will be produced by a New Mexico business within this state;
- (6) the volume of work previously done for the entity requesting proposals which is not seventy-five percent complete with respect to basic professional design services, with the objective of effecting an equitable distribution of contracts among qualified businesses and of assuring that the interest of the public in having available a substantial number of qualified businesses is protected; provided, however, that the principle of selection of the most highly qualified businesses is not violated;

KENTUCKY

45A.7

40 Procedures for proposed project requiring architectural or engineering services.

(1) When a project requiring architectural or engineering services is proposed by a local public agency, except as provided by subsections (2) and (3) of this section, the agency shall:

- (a) Transmit a notice requesting a statement of interest in the proposed project from all firms that have a current qualifications statement on file;
- (b) Give adequate public notice of the proposed project, which may include posting on the Internet or newspaper advertisement, requesting firms to submit qualification statements and statements of interest in the proposed project; or
- (c) Contact an appropriate professional organization for a list of firms capable of providing the necessary services.

(2) If the regulations of a federal department or agency require a procurement process that is different from the process in KRS 45A.730 to 45A.750 in order that financial aid can be granted, then the local government agency may exempt itself from the provisions of KRS 45A.730 to 45A.750.

(3) When a local public agency has formed a working relationship with one (1) or more firms based on work previously contracted between them, then the local public agency may enter directly into negotiations according to KRS 45A.750. If no contract is successfully negotiated, then the local public agency shall comply with this section, KRS 45A.745, and KRS 45A.750.

Effective:

July 15, 1998

45A.745 Criteria for evaluation of interested firms.

(1) A local public agency shall evaluate those firms submitting statements of interest in a proposed project according to the following criteria:

- (a) Qualifications;
- (b) Ability of professional personnel;
- (c) Past record and experience;
- (d) Performance data on file;
- (e) Willingness to meet time and budget requirements;
- (f) Location;
- (g) Workload; and
- (h) Any other factors that the local public agency has set forth in writing, including the reciprocal preference for resident bidders required by KRS

45A.494.

(2) The local public agency may then conduct discussions and require interviews with firms deemed to be the most qualified according to the criteria in subsection (1) of this section. Bids for the cost of the proposed project shall not be a factor in the evaluation of firms until negotiations are begun in accordance with KRS 45A.750.

(3) The local public agency shall select, on the basis of the evaluations done in subsections (1) and (2) of this section, at least three (3) firms that are judged to be the most qualified and rank them accordingly. If fewer than three (3) firms are judged to be qualified, then those firms that remain shall be ranked in like manner.

Effective:

July 15, 2010

45A.750 Negotiation of contract.

(1) Based on the rankings developed in KRS 45A.745(3), the local public agency shall contact the highest ranked firm and attempt to negotiate a contract for a fair and reasonable value that takes the following into account:

- (a) The estimated value of the services needed;
- (b) The scope and complexity of the proposed project;
- (c) The business risk anticipated; and
- (d) The professional nature of the services required.

(2) If the local public agency is unable to negotiate a satisfactory contract with the Highest ranked firm, negotiations with that firm shall be terminated. The local public agency shall then go through the negotiation process with the next firm in the rankings, continuing this procedure until an agreement is reached or the list of ranked firms is exhausted.

(3) If negotiations with all of the ranked firms fail to result in a satisfactory contract, the local public agency shall reevaluate the architectural or engineering services involved in the proposed project and proceed to comply with KRS 45A.740 and 45A.745 until a contract is successfully negotiated.

Effective:

July 14, 1992

IOWA

Does not have a QBS law, but chooses to use pure QBS on its merits and has won national awards for its procurement process.

ATTACHMENT

3

QUALIFICATIONS-BASED SELECTION

QBS: A Guide for Selecting an Architect, Engineer, or Land Surveyor

For Public Owners

Qualifications Based Selection is endorsed by those organizations responsible for purchasing hundreds of millions of dollars in services in Iowa annually!

The following organizations concur with the findings of the American Public Works Association (as stated in the APWA publication ‘Selection and Use of Engineers’) that the “public’s best interest is served when governmental agencies select architects, engineers, and related professional technical consultants for projects and studies through Qualification Based Selection (QBS) procedures. Basing selection on qualifications and competence (rather than price) fosters greater creativity, flexibility, and minimizes the potential for disputes and litigation.”

These organizations have endorsed this publication:

- The American Institute of Architects, Iowa Chapter
- The Iowa Department of Transportation
- The American Council of Engineering Companies of Iowa
- The Iowa Engineering Society
- The Iowa Section American Public Works Association
- The Society of Land Surveyors of Iowa
- The Iowa Section of the American Society of Civil Engineers
- The Iowa County Engineers Association

ATTACHMENT

4

KANSAS

ENGINEERING COSTS: IN-HOUSE VS CONTRACTING OUT

In this study the total cost for a DOT design team member is compared with the total cost of a private firm design team member. The total cost has been calculated as follows:

TOTAL COST OF A DOT DESIGN TEAM MEMBER

DIRECT SALARY (\$) + FRINGE AMOUNT (\$) + OVERHEAD AMOUNT (\$), with:

- **DIRECT SALARY (\$)***: taken as the average of the design team salaries
- **FRINGE AMOUNT (\$) = FRINGE RATE (%) X DIRECT SALARY (\$)**, with:
 - **FRINGE RATE (%)**: taken as the sum of the following benefits:
 - Health insurance
 - Retirement
 - Worker compensation
 - FICA taxes
- **OVERHEAD AMOUNT (\$) = OVERHEAD RATE (%) X DIRECT SALARY (\$)**, with:
 - **GENERAL OVERHEAD COSTS (\$) / DIRECT LABOR COSTS (\$)**, with:
 - **GENERAL OVERHEAD COSTS (\$) = OVERHEAD EXPENSES NOT PERSONNEL (\$) + INDIRECT LABOR (\$)**, with:
 - **INDIRECT LABOR (\$) = 40% TOT.SALARIES**
 - **OVERHEAD EXPENSES NOT PERSONNEL (\$)***
 - **DIRECT LABOR COSTS (\$) = 60% TOT.SALARIES**, with 60% the estimated utilization rate

*Note that the data required to calculate the salary and the overhead expenses not personnel, have been taken from the FY2014 expenditures spreadsheets, downloaded from transparency open checkbook websites of DOT or the State, while the data for the fringe rate have been taken from the employee handbook of DOT or the State.

In addition, salaries and wages were distributed 60% to direct labor and 40% to indirect labor for purposes of the overhead rate calculation. As the DOT does not present direct and indirect labor costs separately as is required to calculate the overhead rate based on FAR, it was necessary to estimate the direct / indirect labor distribution. A utilization rate of 60% was used to be consistent with the approximate industry average for A/E firms.

Finally, general overhead costs include state DOT expenditures reported, excluding costs which were determined to be allocable to direct projects (highway design, construction, environmental, roadway maintenance, etc.). In assigning costs to direct and indirect cost categories, we used the best information available to us, which included detailed research of supporting information made publicly available by the state DOT.

TOTAL COST FOR PRIVATE FIRM DESIGN TEAM MEMBER

- **DIRECT SALARY (\$)*****
- **FRINGE AMOUNT (\$) = FRINGE RATE (%)*** X DIRECT SALARY (\$)**
- **OVERHEAD AMOUNT (\$) = OVERHEAD RATE (%)*** X DIRECT SALARY (\$)**
- **PROFIT AMOUNT (\$) = PROFIT RATE (%)*** X [DIRECT SALARY (\$) + FRINGE AMOUNT (\$) + OVERHEAD AMOUNT (\$)]**

***These data have been obtained with the use of Google form survey.

KANSAS

DOT DATA

DIRECT SALARY	\$ 64,629
Calculation of Direct / Indirect Labor	
Total State DOT Salaries and Wages	\$ 93,054,151
X Estimated Utilization Rate	60.0%
= Direct Labor	\$ 55,832,491
Total State DOT Salaries and Wages	\$ 93,054,151
X Estimated Utilization Rate	40.0%
= Indirect Labor	\$ 37,221,660
FRINGE AMOUNT	
Direct Salary	\$ 64,629
X Fringe Rate	42.86%
= Fringe Amount	\$ 27,700
OVERHEAD AMOUNT	
Direct Salary	\$ 64,629
X Overhead Rate	229.9%
= Overhead Amount	\$ 148,557
Calculation Overhead Rate	
General Overhead Costs	\$ 128,336,860
/ Direct Labor Costs	\$ 55,832,491
= Overhead Rate	229.9%
Calculation of General Overhead Costs	
Overhead expenses not personnel	\$ 91,115,200
+ Indirect Labor	\$ 37,221,660
= General Overhead Costs	\$ 128,336,860
TOTAL COST	\$ 240,886

PRIVATE FIRMS DATA

KANSAS

A total of 10 firms data have been used for the calculations.

DIRECT SALARY	\$ 65,730
FRINGE AMOUNT	
Direct Salary	\$ 65,730
X Fringe Rate	38.2%
= Fringe Amount	\$ 25,076
OVERHEAD AMOUNT	
Direct Salary	\$ 65,730
X Overhead Rate	134.4%
= Overhead Amount	\$ 88,357
PROFIT AMOUNT	
Direct Salary + Fringe Amount + Overhead Amount	\$ 179,163
X Profit Rate	10.2%
= Profit Amount	\$ 18,320
TOTAL COST	\$ 197,483

KANSAS

SUMMARY COMPARISON TABLE

	Annual Salary	Fringe Rate	Fringe Amount	OH Rate	OH Amount	Profit Rate	Profit Amount	Total Annual Salary	DOT-CONSULTANTS
DOT	\$ 64,629	42.9%	\$ 27,700	229.9%	\$ 148,557	0.0%	\$ -	\$ 240,886	\$ 43,403
CONSULTANT	\$ 65,730	38.2%	\$ 25,076	134.4%	\$ 88,357	10.2%	\$ 18,320	\$ 197,483	