

# **Economic and Fiscal Impact Analysis of Modifications to Architectural and Engineering Program Selection Process Regulations**

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# 1. Introduction

The California Department of Water Resources (DWR) Division of Engineering (DOE) is currently in the rulemaking process for revision and adoption of its Architectural and Engineering program (A&E) regulations in 23 CCR Division 2, Chapter 1.7: Selection Process for Private Architectural, Landscape Architectural, Engineering, Environmental, Land Surveying, and Construction Project Management Firm. Specifically, DWR's proposed rulemaking involves modifications to §383 and §390. This authority is granted to DWR by statute specified in GOV §4525 - 4529.5, PCC §6106, and PCC §10335. California law requires that a rulemaking agency provide an assessment of the fiscal impacts its regulations would have on State and local governments and assess the potential economic impact on State businesses and individuals.

This Economic and Fiscal Impact Analysis (EFIA) provides the assessments required by Government Code §11346.2 - 11346.5. The data, methods, and analytic approach applied in this analysis are consistent with applicable State Administrative Manual (SAM) sections. The impacts described in this EFIA are also disclosed and referenced in an Economic and Fiscal Impact Statement (Form STD 399).

## 1.1 Overview of Proposed Regulation

DWR is developing changes to its regulations that would modify the process for Requests for Qualifications (RFQs) and contracting for existing and new A&E contractors. The salient features of the proposed regulation that may cause economic and fiscal impacts are as follows:

- 1) DWR would have the explicit authority to post a range of potential contract values when posting RFQ announcements (a range of estimated contract values could be provided while specific estimates would continue to be kept confidential per DWR regulations).
- 2) 23 California Code Regulation section 390 (23 CCR 390) is unclear, confusing and its intent is duplicative of its referenced statute, Government Code section 4526. Regulations require clarity, necessity, and non-duplication. As this section accomplishes none of these objectives, it would be eliminated to prevent confusion.

## 1.2 Major Regulation Determination

A Major Regulation is a proposed action, amendment, or repeal that would result in an economic impact on businesses and individuals in the State of greater than \$50 million in the first 12 months following implementation of the regulation. (Gov. Code, § 11342.548.). This analysis finds that the net direct annual impact on businesses (A&E contractors) in the State is less than \$1 million. Potential indirect and induced impacts would be small in magnitude relative to the potential direct impact, and the estimated total economic impact would remain less than \$1

million. See Section 4 for the analysis supporting these estimates. The estimated total economic impact is far below the Major Regulation threshold of \$50 million.

### 1.3 Report Organization

The remainder of the report is structured as follows. The following section describes the analytical approach and data used to assess economic and fiscal impacts. Section 3 provides an overview of public A&E procurement, and estimated costs for A&E contractors seeking to contract with DWR. This establishes baseline conditions that can be used to evaluate fiscal and economic impacts. Section 4 then summarizes the economic and fiscal impacts of the proposed regulation.

## 2. Analytic Approach and Data

Economic and fiscal impacts were considered using a standard sequential approach that includes four categories of impacts. The level of detail with which each category is assessed depends on the nature of the proposed regulation and the data available for quantitative or qualitative assessment.

1. **Direct economic impacts.** These represent direct costs and benefits to businesses and individuals that are attributable to the regulation and can be quantified.
2. **Market economic effects.** The costs faced by firms to provide A&E services make up the industry supply curve. The industry supply curve (services offered by A&E contractors) could shift in response to substantial changes in direct costs or benefits.
3. **Indirect and induced economic impacts.** Multiplier effects on other businesses and individuals that result from the direct costs or benefits and any changes in the equilibrium market conditions for the industry. These are typically assessed using a standard economic impact model such as BEA-RIIMS, REMI, or IMPLAN<sup>1</sup>.
4. **Fiscal impacts.** The fiscal impact analysis follows the economic impact analysis by quantifying the fiscal cost of the regulation to DWR and other state/local agencies after accounting for the industry adjustments that are reflected in the economic impact analysis.

The economic impacts of the proposed regulation are established relative to a baseline condition. For economic impact analysis of proposed regulations, Cal. Gov. Code 11346.3(e) states “...the baseline for the regulatory analysis shall be the most cost-effective set of regulatory measures that are equally effective in achieving the purpose of the regulation in a manner that ensures full

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<sup>1</sup> These are examples of well-known economic impact models that can be used to assess the larger regional economic impacts on jobs and income of a change in direct economic activity.

compliance with the authorizing statute or other law being implemented or made specific by the proposed regulation” (Cal. Gov. Code 11346.3(e)). The changes to regulations proposed here would clarify two features of DWR’s existing process for A&E contracting, so the baseline condition for the impact analysis is DWR’s existing process. This ensures that the economic impact measures only the incremental effect attributable to the proposed changes.

### **2.1.1 Direct Impacts**

Direct impacts are costs and benefits to the businesses and individuals in the industry directly affected by the proposed regulation. This is primarily A&E contractors, but also could include subcontractors in related fields. Direct impacts include direct costs, offsetting direct benefits, and the net direct impact (benefits minus costs).

### **2.1.2 Market Effects**

If the net direct impact of the regulation includes a change in the marginal cost to firms, there could be additional market effects. Marginal costs, which are the costs to produce additional units at different quantities, make up the industry supply curve. In this case of an A&E contracting process, the supply can be characterized as the number of A&E SOQs received by DWR for a particular solicitation. For example, if a proposed change in the A&E RFQ process lowers the cost of submitting an SOQ or increases the perceived likelihood of success, it can be said to increase the supply (or shift the supply curve) of SOQs received. Market effects could also result from any anticipated shifts in demand by customers of businesses in the impacted industry (or industries), although that is not a relevant effect of this proposed regulation.

### **2.1.3 Indirect and Induced Impacts**

The analysis of indirect and induced impacts (so-called multiplier effects) evaluates the effect of direct changes in costs and/or benefits to businesses to evaluate the total impact of the proposed regulation on jobs, taxes, and value-added across the state. The total economic impact is expressed as the sum of direct, indirect, and induced impacts. Indirect impacts capture changes in intermediate purchases and other spending by the primary industry in other sectors of the economy. Induced impacts capture the change in expenditures by employees in the primary industry and all linked industries.

The IMPLAN software is an input-output economic model that estimates the effects of exogenous changes in final demand within a specified geographic region (in this case, California). The model leverages a robust data set of national and regional economic accounts that document purchasing relationships between industries through multiple rounds of spending. The software also incorporates institutional demand and inter-institutional transfers that reflect purchases made by households and government agencies. This analysis uses the Impacts for

Planning and Analysis (IMPLAN) v3.1 model (MIG. Inc, 2016) with a California county-level 2014 dataset as the baseline year for the analysis.<sup>2</sup>

### **2.1.4 Fiscal Impacts**

Fiscal impacts are changes to public agency costs and revenues associated with the regulation. The fiscal impacts of the proposed regulation to DWR may include changes in time spent on the procurement process. Fiscal impacts could also include changes in DWR revenue if the regulatory changes were expected to change or otherwise affect the value of contracts.

## **3. A&E Contractor Baseline Overview**

This economic analysis establishes current baseline conditions without the proposed regulation. To support the analysis, the baseline conditions include the current total number of contracts, total value of contracts, the number of contracts requiring RFQs, and the number of firms replying to an RFQ with a Statement of Qualification (SOQ). This information is also used to estimate spending on business development by A&E contractors during the procurement process.

The following section provides a summary of information found in peer reviewed studies relevant to the analysis. This is followed by a summary of the current market for A&E contractor services from DWR. Section 3.3 then provides estimates of the spending on A&E procurement and the RFQ process by participating firms.

### **3.1 Literature Review**

A review of published studies of A&E procurement and procurement in similar sectors was conducted to better understand the full range of possible economic impacts.

While studies are not available on spending on California A&E project proposals specifically, studies that are available on related industries were reviewed to gather representative data. Shelton (2018)<sup>3</sup> reported firms in Maryland spending anywhere from \$24,000 to \$360,000 on competitive tenders for architecture, engineering, and construction management/general

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<sup>2</sup> All values are updated to current (2022) dollars using the GDP-IPD. The year of the IMPLAN dataset (2014) corresponds only to industry linkages, which have shown to be consistent over the past decade. This version of IMPLAN is preferred because it allows more options for customization of industry sectors and relationships analyzed.

<sup>3</sup> Shelton, B. 2018. Qualifications-Based Selection (QBS): Best Practice for Architecture, Engineering and Construction Management/General Contractor Procurement in Canada. A QBS Canada Publication.

www.QBSCanada.ca. Funded by The Ontario Association of Architects.  
[https://www.oaa.on.ca/oa/assets/images/bloaags/text/final\\_qbs\\_report\\_sep\\_1\\_2018.pdf](https://www.oaa.on.ca/oa/assets/images/bloaags/text/final_qbs_report_sep_1_2018.pdf)

contractor services. Feldman and Kelley (2006)<sup>4</sup> report proposal preparation costs ranging from \$3,000 to over \$400,000 for federal research and development projects, including engineering. Other studies find that the cost of preparing a proposal can be up to 8 percent of total awarded contract values for construction and engineering projects.<sup>5,6</sup>

Some studies have also explored the competitive landscape of the procurement process in A&E and related industries. However, it is important to note that DWR A&E initial awards are based on qualifications, not cost. The cost of the services is defined in the subsequently negotiated contract and task orders. Most studies reviewed focus on the relationship between contract cost and the number of bidders in a cost competitive environment. Hanak and Muchova (2015)<sup>7</sup> evaluated the impact of competition on contract award price in civil engineering. They found that projects with only 1 or 2 bidders end up with contract awards about equal to the expected costs to government agencies, however when there are 7 or more bidders, contract awards reduce to about 80 percent of the expected cost. Grega and Nemec (2015)<sup>8</sup> explore the relationship between number of bidders and bid prices across public procurement in a variety of sectors. They also found that award price and number of bidders are inversely related, and that the prices change by about 2 to 4 percent per bidder, with greatest savings between 6 to 8 bidders. That is, up to about 8 bidders, the expected award price decreases by between 2 and 4 percent per additional bidder. Shrestha and Pradhananga (2010)<sup>9</sup> evaluated public procurement in the

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<sup>4</sup> Feldman, M.P., and Kelley, M.R. 2006. The ex ante assessment of knowledge spillovers: Government R&D policy, economic incentives and private firm behavior. *Research Policy* 35 (2006) 1509–1521. <https://www.sciencedirect.com/science/article/abs/pii/S0048733306001545>

<sup>5</sup> Hwang, J.S., and Kim, Y.S. 2015. A Bid Decision-Making Model in the Initial Bidding Phase for Overseas Construction Projects. *KSCE Journal of Civil Engineering* (2016) 20(4): 1189-1200. <https://link.springer.com/article/10.1007/s12205-015-0760-y>

<sup>6</sup> Seshadri, S. 2005. *Sourcing strategy: Principle, policy and designs*, Springer Science & Business Media, New York, NY

<sup>7</sup> Hanak, T., and Muchova, P. 2015. Impact of competition on prices in public sector procurement. *Procedia Computer Science* 64 (2015) 729 – 735. <https://www.sciencedirect.com/science/article/pii/S1877050915027362>

<sup>8</sup> Grega, M., and Nemec, J. 2015. Factors Influencing Final Price of Public Procurement: Evidence from Slovakia. *Procedia Economics and Finance* 25 (2015) 543 – 551. <https://www.sciencedirect.com/science/article/pii/S2212567115007686>

<sup>9</sup> Shrestha, P., and Pradhananga, N. 2010. Correlating Bid Price with Number of Bidders and Final Construction Cost of Public Street Projects. *Transportation Research Record: Journal of the Transportation Research Board*, No. 2151, Transportation Research Board of the National Academies, Washington, D.C., 2010, pp. 3–10. <https://www.researchgate.net/publication/245564154>



construction sector and also found that an increase in number of bidders leads to a decrease in the expected award price.

In summary, the literature from other regions and contracting processes shows the intuitive result that competition for projects can lower the overall cost of the project. However, these studies include fixed fee projects as well as time and materials contracts. DWR typically awards time and materials contracts where the total payments under the contract are in proportion to the labor effort and deliverables provided by the contractor. That is, the scope of services may be greater or less than the contracted amount initially negotiated and agreed to between DWR and the A&E contractor. In addition, the literature did not compare the cost of services from small or large businesses. Most DWR A&E contracts are for large businesses. The proposed regulations do not include any changes to encourage additional bids from small businesses, but if future regulations consider such changes, it would be valuable to understand differences in bids, performance, and cost between small and large firms.

### 3.2 Current Market for DWR DOE A&E Contractor Services

To establish baseline industry conditions, information was gathered about the values of DWR A&E contracts. Table 1 summarizes the total value of DWR A&E contracts awarded, number of contracts awarded, and average value of contracts awarded from 2017 to 2022. All dollar values were indexed for inflation to 2022 levels using the Gross Domestic Product Implicit Price Deflator (GDP-IPD).<sup>10</sup> As Table 1 shows, the total value of all contracts awarded in a year has ranged from about \$100 million to \$350 million over this period, with an average of \$218 million total awarded per year. The number of contracts awarded in a year was between 11 and 20, with an average of 17. The average total value of each contract awarded has ranged from \$6 million in 2021 to \$22 million in 2019, with an overall average of \$13 million per contract.

**Table 1. Value and Quantity of DWR A&E Contracts by Year, 2017 – 2022 (2022\$)**

<b>Contract Start Year</b>	<b>Total Value of A&amp;E Contracts Awarded (mil. \$)</b>	<b>Number of Contracts</b>	<b>Average Value of Contract (mil. \$)</b>
2017	\$166.73	20	\$8.34
2018	\$150.43	11	\$13.68
2019	\$346.66	16	\$21.67
2020	\$215.23	18	\$11.96
2021	\$109.43	18	\$6.08
2022	\$320.54	20	\$16.03
<b>Avg.</b>	<b>\$218.17</b>	<b>17</b>	<b>\$12.96</b>

<sup>10</sup> U.S. Bureau of Economic Analysis, Gross Domestic Product: Implicit Price Deflator [GDPDEF], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/GDPDEF>, May 16, 2023

In order to better estimate costs incurred by A&E firms during the procurement process for DWR A&E contracts, additional data were gathered for the contracts summarized in Table 1. Table 2 summarizes the number of contracts each year that began with an RFQ. The exceptions to the RFQ process are typically when a contract must be issued quickly during an emergency declared by the Governor. Table 2 also shows the total number of SOQs submitted by firms each year, and the estimated number of interviews conducted prior to awarding A&E contracts each year. This is based on the statutory requirement that DWR hold discussions with three qualified firms before selecting one to contract.<sup>11</sup> This is assumed to apply to all contracts except those issued during an emergency declared by the Governor.

**Table 2. Contracts, RFQs, SOQs, and Estimated Number of Interviews by Year, 2017 – 2022**

<b>Contract Start Year</b>	<b>Number of Contracts</b>	<b>Number of Contracts w/ RFQs</b>	<b>Number of Submitted SOQs</b>	<b>Estimated Number of Interviews</b>	<b>SOQ per RFQ</b>	<b>SOQ per Contract</b>
2017	20	8	31	21	3.9	1.6
2018	11	9	23	18	2.6	2.1
2019	16	16	44	42	2.8	2.8
2020	18	18	53	42	2.9	2.9
2021	18	18	66	33	3.7	3.7
2022	20	18	46	51	2.6	2.3
<b>Avg.</b>	<b>17</b>	<b>15</b>	<b>44</b>	<b>35</b>	<b>3.1</b>	<b>2.6</b>

### **3.3 Estimated Spending by A&E Contractors on Procurement Process**

Proposal costs for A&E contractors can vary based on factors like the size of the contract, complexity of the proposal and scope, and whether or not an interview is required. In general, for larger contracts, a range of 1 to 2 percent of potential contract value is used as a target for proposal costs.<sup>12</sup> To avoid underestimating these costs, this analysis estimates firms spend 2.5 percent of the total value of a contract on business development during the procurement process, including SOQ preparation, interviewing, and contract negotiation.<sup>13</sup> As shown in Table 1, the

<sup>11</sup> Gov. code § 4527

<sup>12</sup> This estimate is based on experience with preparing proposals and SOQs, peer reviewed literature, and is also consistent with some available guidelines. See, for example, <https://www.proposalworks.com/pre-proposal-writing-tips/budget> or <https://www.ociwins.com/government-proposal-consultants/cost-prepare-proposal/>

<sup>13</sup> Note that firms spend additional business development costs outside of specific procurement processes.

average contract value is \$13 million. If business development costs are 2.5 percent of total contract value, this equals \$324,000 per contract. Industry literature summarized in section 3.1 suggests this is at the high end of spending on A&E proposals when costly competitive analyses are required. Therefore, it should serve as a representative, conservatively high estimate.

SOQs prepared by large A&E firms often include a number of smaller firms. These smaller firms also incur costs to prepare and submit information for the SOQ. This can include assisting with preparing sections of the SOQ, preparing firm qualifications and resumes, and assisting with the selection interview process. No data were available on the typical number of smaller firms included on any given SOQ submission. For the purposes of this analysis the estimated businesses development costs of 2.5 percent or \$324,000 per contract are interpreted as also including the costs of any smaller firms involved.<sup>14</sup>

There is also no data available on the share of business development costs per contract that is spent on SOQ preparation, the share spent on interviews, and on contract negotiation. This analysis assumes 60 percent of these costs (\$194,400) would be spent on SOQ preparation, 30 percent (\$97,200) would be spent on interviewing, and 10 percent (\$32,400) on contract negotiations. It is further assumed that selected firms successfully enter into a contract 80 percent of the time once they enter into negotiations. These assumptions are based on experience and familiarity with the A&E contracting process. Based on these assumptions, the total estimated SOQs prepared each year, the estimated number of interviews conducted, and the estimated number of firms who enter into contract negotiations, the total estimated business development cost for A&E firms for DWR DOE A&E projects is \$12.3 million annually.

## **4. Analysis of Economic and Fiscal Impacts**

The following sections present the results of the economic and fiscal impact analysis of the proposed regulation.

### **4.1 Proposed Regulation**

The proposed regulation could affect current A&E contractors, future A&E contractors, related subcontractors, and DWR. The proposed regulation includes the following potential changes and economic impacts:

- 1) The regulation clarifies that DWR's expected range of values of A&E contracts can be made public. While existing regulations prevent (and will continue to prevent) DWR from sharing its specific, single estimate for a project or service out for solicitation, it

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<sup>14</sup> In practice, these costs are representative of larger firms and larger awards. For smaller businesses that may prepare SOQs on projects with smaller contacts amounts but are still subject to the same SOQ process, the proposal development costs may be substantially higher than 2.5 percent of the total contract amount.

does not strictly prohibit presenting an estimated range of values. DWR has previously and will continue to share an estimated range of contract values via its ‘Look Ahead Report’ and other means. Therefore, the direct economic impacts of this regulatory change were not quantified and are expected to be very small.

- 2) 23 California Code of Regulations section 390 (23 CCR 390) is unclear, confusing and its intent is duplicative of its referenced statute, Government Code section 4526. Regulations require clarity, necessity, and non-duplication. As this section accomplishes none of these objectives it should be eliminated to help prevent confusion. The proposed changes would not change DWR’s A&E solicitation, review, and contracting process, nor change the number of RFQs or contracts issued by DWR.

#### **4.1.1 Direct Economic Costs**

DWR is not proposing to change its existing process for releasing RFQs, and it has already been publishing an estimated range of potential contract values in its “Look Ahead Report.” Therefore, the proposed clarification of DWR’s authority to post a range of potential contract values is expected to result in little or no direct, quantifiable economic costs. Nonetheless, this EFIA identifies what direct economic effects might occur as a result of posting this range of values relative to the scenario where this information is not made available. This is to consider the full possible range of economic effects, even if all of these effects are not anticipated.

Direct economic costs to A&E firms could arise if they spend more, individually or in the aggregate, on business development during the procurement process. For example, publishing a range of contract values for each RFQ could inspire additional firms to submit an SOQ if the potential value of the contract is larger than they would have assumed without this information. While this benefits A&E firms by providing them with additional information to use in their decision-making process, it can also result in some additional direct costs in the aggregate for all A&E firms associated with SOQ preparation. Based on the estimate presented in section 3.3, this could increase costs by about \$194,400 per additional SOQ per RFQ.<sup>15</sup> If the proposed regulation were to result in a change in the number of firms who prepare SOQs for a project, it does not follow that the contract revenue received by the winning firm (and therefore the cost to DWR) would change. As noted above, the DWR A&E selection process is based on qualifications and not cost, so no direct effect on the negotiated cost would result if more or fewer firms prepare SOQs.

No direct economic costs would result from the second proposed change regarding exclusions for hiring private A&E contractors to serve as subject matter experts on advisory boards, or for

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<sup>15</sup> As described in section 3.3, this is based on a high-end, conservative estimate for business development costs per awarded contract.

hiring A&E contractors to provide consulting services for specific problems on DWR A&E projects. As previously noted, the proposed change is to provide clarity about DWR's process and would not change that process.

#### **4.1.2 Direct Economic Benefits**

DWR is not proposing to change its existing process for releasing RFQs, and it has already been publishing an estimated range of potential contract values in its "Look Ahead Report." Therefore, the proposed clarification of DWR's authority to post a range of potential contract values is expected to result in little or no direct, quantifiable economic benefits. Nonetheless, this EFIA identifies what direct economic effects might occur as a result of posting this range of values relative to the scenario where this information is not made available. This is to consider the full possible range of economic effects, even if all of these effects are not anticipated.

Direct economic benefits (cost savings) to A&E firms could result from a decrease in spending, by individual firms or in the aggregate, on business development during the procurement process. Publishing a range of contract values for each RFQ provides firms with additional information to assist them in their decision on whether or not to prepare and submit an SOQ. This could result in fewer firms submitting an SOQ if, for example, the potential value of the contract is less than what a firm would have expected without this information, or if information about the range of contract values dissuades a firm from submitting if it believed the amount of contract work was beyond its capability. Based on the estimate presented in section 3.3, this could increase economic benefits (cost savings) by up to \$194,400 per decrease in SOQ per RFQ.<sup>16</sup> No direct economic benefit from an increase in revenue for the selected A&E contractor and its subcontractors is expected because the contract revenue received by the winning firm (and therefore the cost to DWR) would not change. As noted above, the DWR A&E selection process is based on qualifications and not cost, so no direct effect on the negotiated cost would result if more or fewer firms prepared SOQs. Posting a range of contract values might influence the selected firm's initial proposed costs during contract negotiation, but it is unclear if the final negotiated cost would change.

No direct economic benefits would result from the second proposed change eliminating 23 CCR 390, a section which simply restates existing law while adding no further purpose. Again, the proposed change is to provide clarity about DWR's process and would not change that process.

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<sup>16</sup> Ibid.

### **4.1.3 Net Direct Economic Impact**

Based on the direct costs described in section 4.1.1 and direct benefits in section 4.1.2, little or no direct economic impact would be caused by the proposed changes. The estimated net direct economic impact would be less than \$1 million, and likely close to \$0.

### **4.1.4 Market Effects**

Sometimes the direct impacts of regulatory changes can cause further changes in market conditions for private businesses affected by the changes. For example, sometimes changes in regulations can cause a shift in supply and/or demand conditions for firms affected by a proposed regulation. As described above, however, costs and benefits resulting from the proposed regulation are expected to be close to \$0, so no shift in market conditions for A&E firms would be expected.

### **4.1.5 Indirect and Induced Impacts**

Indirect and induced impacts could result from any direct economic impacts of the proposed regulation, whether costs or benefits. However, direct economic impacts are expected to be close to \$0 based on the nature of the proposed regulatory changes. The indirect and induced impacts, therefore, are also expected to be close to \$0, as is the total impact (sum of direct, indirect, and induced impacts).

This EFIA considers the hypothetical direct economic impacts occurring as a result of posting this range of values relative to the scenario where this information is not made available to consider the full possible range of economic effects. Therefore, this section describes the possible indirect and induced impacts associated with these hypothetical (albeit unanticipated) direct impacts.

If the proposed regulation did affect how and how often A&E firms spend money to acquire contracted work from DWR, this would be viewed as an annual change in costs (and as a result, net income) for A&E firms that prepare SOQs for DWR. In this instance, indirect and induced impacts could result from both a change in proprietor income and change in employment income for A&E firms related to the solicitation and contracting process.

As an example, if A&E firms realized a direct benefit (cost savings), this would represent an increase in proprietor income because costs would decrease while the billable work performed by firms would not change. However, cost savings to an A&E firm would also represent a decrease in employment income related to business development and the A&E procurement process. Therefore, to the extent that the proposed changes result in a small increase in A&E firms' procurement expenditure, proprietor income and related indirect impacts would fall slightly but employee compensation and related induced impacts could rise slightly. Conversely, to the extent that the proposed changes result in a small savings in A&E firms' procurement expenditure, proprietor income and related indirect impacts would rise slightly but employee

compensation and related induced impacts could fall slightly. In either case, the magnitude of these net indirect and induced impacts would be small relative to the direct impacts, even if quantified direct impacts were anticipated (which, as previously noted, they are not).

If the proposed regulations affected the number of firms preparing SOQs such that awarded contract values changed (as suggested by several of the studies reviewed), this would create a direct impact on A&E industry output. The IMPLAN sector related to A&E firms is sector 449, 'Architectural, engineering, and related services.' The output multiplier for sector 449 is 2.06, meaning that the total impacts (sum of direct, indirect, and induced impacts) would be a little more than double the size of any direct impact alone. We note that any change in contract value for the A&E firms would also represent a change in DWR's expenditure of public money for the A&E contracts, which would change DWR's and the State's ability to spend that money on other public services. However, based on the findings of little or no direct impact (as previously noted), it follows that little or no indirect or induced impacts would be related to changes in industry output.

#### **4.1.6 Employment (Job) Estimated Impacts**

Employment impacts could also result from any direct economic impacts of the proposed regulation, whether costs or benefits. However, no direct economic impacts were quantified, and they are expected to be close to \$0 based on the nature of the proposed regulatory changes as described above. The employment impacts, therefore, are also expected to be negligible. No jobs would be created or eliminated.

#### **4.1.7 Total Number of Businesses Impacted**

Based on the findings of little or no direct economic impacts, no businesses would be impacted by the proposed regulation. No businesses would be created or eliminated. Since 2016, approximately 64 different firms have contracted with DWR on A&E projects, and this diversity would not be affected by the proposed changes.

#### **4.1.8 Number of Small Businesses Impacted**

Based on DWR A&E contract data from 2017 to 2022, about 20 percent of contracts are awarded to small businesses. Based on the findings of little or no impacts to any businesses, it would also follow that there would be little or no impacts to small businesses specifically. In addition, nothing in the proposed changes would disproportionately burden small businesses.

#### **4.1.9 Estimated Impacts on a Typical Business and Small Business**

As described in sections 4.1.7 and 4.1.8, there are no quantifiable direct impacts on businesses of any size.

#### **4.1.10 DWR Fiscal Impacts**

Based on the findings of little or no direct impacts to A&E firms, it would follow that there would be little or no related fiscal impacts to DWR. DWR may incur some small, unquantified costs related to informing employees about and educating them on the proposed regulatory changes. DWR may also realize some cost savings in the long run as a result of the clarity provided by the proposed regulation. However, given that DWR would not change its A&E solicitation, review, and contracting process, nor change the number of RFQs or contracts issued, these minor costs are not quantified and would be close to \$0.

#### **4.1.11 Other State and Local Public Agencies Fiscal Costs**

The proposed regulation does not increase costs to other state agencies. Outside of potential small costs related to adoption, the regulation would not impact the fiscal costs of DWR, and they would not affect the fiscal costs of any other state agency or department.

The proposed regulation would not require any additional expenditure by local governments. Local governments sometimes interact with DWR on A&E projects in various capacities. However, based on the findings of little or no economic impacts to A&E firms nor fiscal impacts to DWR, it follows that there would be no increase in costs for local governments.

#### **4.1.12 Fiscal Impact on Federal Funding of State Programs**

The proposed regulation does not affect any federally funded state agency or program.

#### **4.1.13 Other Economic Impacts to Businesses, Individuals, Worker Safety, and the State's Environment**

As discussed in sections 4.1.1 through 4.1.3, the proposed regulation would have little or no direct economic impact on businesses. It therefore would not affect the ability of businesses in the State to compete. It also would not encourage any expansion of business in the state. The proposed regulation does not require additional business reports, require the use of specific technologies or equipment, nor prescribe specific actions or procedures. It would not affect worker safety in the state. The proposed regulation would not have environmental impacts. The proposed regulation would not affect investment in the state, nor provide incentive for innovation in products, materials, or processes. It would not affect housing costs.

#### **4.2 Regulation Alternatives**

DWR is proposing the changes in order to clarify its authority to conduct the A&E procurement process as it currently does. The proposed changes do not implement new statutory requirements or authority. Per Gov. code § 11346.2 (4) (A) – (C), DWR has identified no alternatives to the proposed regulation that would be less burdensome or that would lessen any adverse impact.



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