

Thank you for making time to complete this survey, which we are conducting to study the relationship between the practices of state departments of transportation, contractors, and the cost of infrastructure procurement. Through it, we hope to learn more about one of the crucial issues in transportation today: what drives up infrastructure construction costs.

You are receiving this survey because you are a contractor with experience working with the state or local DOT. We are asking these questions to contractors across all states.

Please answer as many questions as you can, and omit those that do not apply to you. Note that we may follow up with you using the contact information you provide.

If you are comfortable, please forward the survey to others who you think would be able to answer the questions you are unable to answer.

Your information will be kept strictly confidential, identified only as being about a particular state.

This research project is being conducted by Zach Liscow (zachary.liscow@yale.edu) of Yale University, William Nober (w.nober@columbia.edu) of Columbia University, and Cailin Slattery (cailin.slattery@berkeley.edu) of the University of California, Berkeley. Please address any questions about the survey or the associated research project to Zach Liscow (zachary.liscow@yale.edu).

This research project is being supported by the US Department of Transportation through a research grant to the National Bureau of Economic Research. Thanks again for sharing your expertise here.

By completing this survey, you are consenting to participate in this study.

Contributor Information

1. Please email me analysis of results after data have been compiled.	<input type="checkbox"/>
2. [CP]Name:	
3. [CP]Phone number:	
4. [CP]Email:	
5. [CPL]Job title:	
6. [P]State: 7. [C] Primary state of operation: 8. [C] Secondary state(s) if applicable:	
9. [C]Firm name:	
10. [C]Firm mailing address:	
11. [C]Years of operation:	<input type="checkbox"/> 0-2 <input type="checkbox"/> 3-5 <input type="checkbox"/> 6-10 <input type="checkbox"/> 11-20 <input type="checkbox"/> More than 20
12. [C]Number of employees:	<input type="checkbox"/> 1-20 <input type="checkbox"/> 21-50 <input type="checkbox"/> 51-100 <input type="checkbox"/> 101+
13. [C]Number of contracts with state and local DOTs in a typical year:	<input type="checkbox"/> 0-1 <input type="checkbox"/> 2-3 <input type="checkbox"/> 4-5 <input type="checkbox"/> 6+

1. Case Study Assumptions

We developed a case study that describes a standard project. Many of the following questions will be asking about your experience with a past project comparable to it, in order to establish consistency. Please familiarize yourself with the details of the case study:

Contractor	The contractor is a road construction contractor that has met all the requirements to bid on contracts from the state DOT.
Contract	The contractor has recently bid on and won a federal-aid contract from the state DOT, referred to from here on as " the agency ." The project entails resurfacing 5 mi of a flat two-lane road that is part of the National Highway System (but is not an Interstate), extending from the outskirts of a medium-sized (approximately 100,000-person) city into the surrounding rural area, with an asphalt overlay of 1 inch. The estimated value of the contract is between \$1-5 million.
Procurement Process	The competitive bidding was awarded using the traditional Design-Bid-Build (low-bid) process. The project is not design-build.

2. Survey

[C] Please answer all questions to the best of your knowledge, based on your experience bidding on and completing contracts in your current primary state of operation.

[P] Please answer all questions to the best of your knowledge, based on your experience in your state.

<p>1. What do you think are the main aspects of the procurement and administrative process of highway construction that increase construction costs?</p>	
<p>2. Which of the following most accurately describes the state department of transportation?</p>	<p><input type="checkbox"/> Severely understaffed <input type="checkbox"/> Moderately understaffed <input type="checkbox"/> Appropriately staffed <input type="checkbox"/> Moderately overstaffed <input type="checkbox"/> Severely overstaffed <input type="checkbox"/> I don't know</p>
<p>3. How quickly do employees at the state department of transportation get back to you when you contact them?</p>	<p><input type="checkbox"/> Same day <input type="checkbox"/> Within 48 hours <input type="checkbox"/> Within a week <input type="checkbox"/> Over a week <input type="checkbox"/> I don't know</p>
<p>4. To the best of your knowledge, when the agency prepares to advertise a new procurement opportunity for a contract like the one described in the case study, which of the following does the agency use to estimate the contract value and projected schedule? <i>Select all that apply.</i></p> <p>(a) To the best of your knowledge, how often does the agency use consultants to draw up project plans?</p>	<p><input type="checkbox"/> Market analysis <input type="checkbox"/> Standardized unit cost or deterministic cost estimation <input type="checkbox"/> Project-specific technical drawings <input type="checkbox"/> Feasibility study <input type="checkbox"/> Similar projects from previous years <input type="checkbox"/> Probabilistic risk-based estimating <input type="checkbox"/> Other, please explain: <input type="checkbox"/> I don't know</p> <p><input type="checkbox"/> Very rarely (less than 10% of projects) <input type="checkbox"/> Rarely (10-25%) <input type="checkbox"/> Occasionally (26-50%) <input type="checkbox"/> Often (51-90%) <input type="checkbox"/> Very often (over 90%) <input type="checkbox"/> I don't know</p>
<p>5. What information does the agency publish before bids are due? <i>Select all that apply.</i></p>	<p><input type="checkbox"/> Estimated contract value <input type="checkbox"/> Estimated/standard unit costs <input type="checkbox"/> Bid bond <input type="checkbox"/> Number of bidders <input type="checkbox"/> Identity of bidders <input type="checkbox"/> Project plans <input type="checkbox"/> Other, please describe: <input type="checkbox"/> I don't know</p>

<p>6. How many firms would you expect to bid on a project like the one described in the case study?</p>	<input type="checkbox"/> 0-1 <input type="checkbox"/> 2-3 <input type="checkbox"/> 4-5 <input type="checkbox"/> More than 5 <input type="checkbox"/> I don't know
<p>7. Which of the following best describes your experience regarding other companies' bidding?</p>	<input type="checkbox"/> I can usually predict exactly which firms will bid on a project <input type="checkbox"/> I know all of the firms that are capable of bidding, but not which ones actually will bid <input type="checkbox"/> I know many of the firms that might bid, but sometimes there are surprise bidders <input type="checkbox"/> There are often firms bidding that I do not know/expect <input type="checkbox"/> Other, please describe: <input type="checkbox"/> I don't know
<p>8. To the best of your knowledge, what are some common reasons for disqualification in the prequalification stage? <i>Select all that apply.</i></p>	<input type="checkbox"/> Insufficient bid bond <input type="checkbox"/> Past performance <input type="checkbox"/> Technical error <input type="checkbox"/> Firm has wrong specialty <input type="checkbox"/> Other, please explain: <input type="checkbox"/> I don't know
<p>9. To the best of your knowledge, how often does the agency do outreach to increase the bidder pool for highway construction projects?</p>	<input type="checkbox"/> Never <input type="checkbox"/> Very rarely (1-10% of bids) <input type="checkbox"/> Rarely (10-25%) <input type="checkbox"/> Occasionally (26-50%) <input type="checkbox"/> Often (51-90%) <input type="checkbox"/> Very often (over 90%) <input type="checkbox"/> I don't know
<p>10. Are you ever concerned about your bids being declared mathematically unbalanced?</p> <p><i>Note: a mathematically unbalanced bid is one containing unit bid items which do not reflect reasonable actual costs plus a reasonable proportionate share of the bidder's anticipated profit, overhead costs, and other indirect costs.</i></p>	<input type="checkbox"/> No, because we set our unit bids close to our actual costs. <input type="checkbox"/> No, because the agency rarely declares bids mathematically unbalanced. <input type="checkbox"/> Yes, on some bids. <input type="checkbox"/> Yes, on most bids. <input type="checkbox"/> Other, please specify <input type="checkbox"/> I don't know
<p>11. When a bidder is excluded before the contract is awarded, does the state DOT provide an explanation of the reasons for the exclusion in writing?</p>	<input type="checkbox"/> Yes, always <input type="checkbox"/> Yes, but only upon request of the bidder <input type="checkbox"/> No, the excluded bidder will be notified directly in the contract award <input type="checkbox"/> Other (please explain) <input type="checkbox"/> I don't know
<p>12. For a contract like the one described in the case study, how many days would pass on average between public notice of award and contract signing? <i>Please include the time for the winner to submit relevant documents and the time to sign the contract.</i></p>	<p>Number of days:</p> <input type="checkbox"/> I don't know
<p>13. Does the contractor need to obtain work permits or other administrative authorizations between public notice of award and</p>	<input type="checkbox"/> Yes, please list them: <input type="checkbox"/> No

<p>contract signing? Please include environmental permits, occupancy permits, activity permits, etc. as applicable.</p>	<input type="checkbox"/> I don't know
<p>14. When you win a bid, typically what is it about your firm that allows you to have the lowest bid?</p>	<input type="checkbox"/> I don't know
<p>15. Do you engage in research-and-development to lower your costs of producing infrastructure?</p>	<input type="checkbox"/> Yes, please describe what you do: <input type="checkbox"/> No <input type="checkbox"/> I don't know
<p>16. In your experience, how many change orders would a contract like the one described in the case study typically have?</p>	Please select: <input type="checkbox"/> I don't know
<p>17. If the contract was for a <u>design-build project</u>, how many change orders would it typically have?</p>	Please select: <input type="checkbox"/> I don't know
<p>18. Are the results of change orders made publicly available?</p>	<input type="checkbox"/> Yes, within a month <input type="checkbox"/> Yes, in longer than a month <input type="checkbox"/> No <input type="checkbox"/> I don't know
<p>19. How many days would typically pass from the moment one of the parties requests/initiates a change order until a new contract amendment is signed?</p>	Number of days: <input type="checkbox"/> I don't know
<p>20. How often is the construction project delivered by the original deadline?</p>	<input type="checkbox"/> Very rarely (less than 10% of projects) <input type="checkbox"/> Rarely (10-25%) <input type="checkbox"/> Occasionally (26-50%) <input type="checkbox"/> Often (51-90%) <input type="checkbox"/> Very often (over 90%) <input type="checkbox"/> I don't know
<p>21. If a project is delayed, what are usually the main reasons? <i>Select all that apply.</i></p>	<input type="checkbox"/> Weather shocks (natural disasters, flooding, etc.) <input type="checkbox"/> Burdensome administrative processes within the agency <input type="checkbox"/> Capacity of the agency (staff/skills/budgetary constraints) <input type="checkbox"/> Capacity of the contractor (technical/managerial constraints) <input type="checkbox"/> Financial constraints of the contractor <input type="checkbox"/> Planning on the agency side (incomplete project specifications, etc.) <input type="checkbox"/> Change of project scope <input type="checkbox"/> Legal challenges by citizens' groups <input type="checkbox"/> Third party delays related to utilities or railroad coordination <input type="checkbox"/> Covid-related supply shortages <input type="checkbox"/> Other, please explain: <input type="checkbox"/> I don't know

<p>22. How often are construction projects that are comparable to the case study delivered within the awarded amount?</p>	<p><input type="checkbox"/> Very rarely (less than 10% of projects) <input type="checkbox"/> Rarely (10-25%) <input type="checkbox"/> Occasionally (26-50%) <input type="checkbox"/> Often (51-90%) <input type="checkbox"/> Very often (over 90%)</p>
<p>23. If a project has a cost overrun, what are usually the main reasons? <i>Select all that apply.</i></p>	<p><input type="checkbox"/> Market conditions (changes in input prices, fluctuations in exchange rate, etc.) <input type="checkbox"/> Weather shocks (natural disasters, flooding, etc.) <input type="checkbox"/> Burdensome administrative processes within the agency <input type="checkbox"/> Capacity of the agency (staff/skills/budgetary constraints) <input type="checkbox"/> Capacity of the contractor (technical/managerial constraints) <input type="checkbox"/> Financial constraints of the contractor <input type="checkbox"/> Planning on the agency side (incomplete project specifications, etc.) <input type="checkbox"/> Change of project scope <input type="checkbox"/> Legal challenges by citizens' groups <input type="checkbox"/> Third party delays related to utilities or railroad coordination <input type="checkbox"/> Covid-related supply shortages <input type="checkbox"/> Other, please explain: <input type="checkbox"/> I don't know</p>
<p>24. For a contract like the one described in the case study, how many days would pass on average <u>between contract signing and receipt of a notice to proceed with construction?</u></p>	<p>Number of days: <input type="checkbox"/> I don't know</p>
<p>25. Does the contractor need to obtain work permits or other administrative authorizations <u>between contract signing and receipt of a notice to proceed with construction?</u> <i>Please include environmental permits, occupancy permits, activity permits, etc. as applicable.</i></p>	<p><input type="checkbox"/> Yes, please list them: <input type="checkbox"/> No <input type="checkbox"/> I don't know</p>
<p>26. Are there any labor and/or subcontracting requirements that increase costs?</p>	<p><input type="checkbox"/> Disadvantaged Business Enterprise Program requirements <input type="checkbox"/> Minority and Women Owned Business Enterprise Program requirements <input type="checkbox"/> Limits on share of project that can be subcontracted <input type="checkbox"/> Local hiring requirements <input type="checkbox"/> Union construction workers <input type="checkbox"/> Other: <input type="checkbox"/> I don't know</p>
<p>27. How does the agency's use of third-party consultants impact construction costs?</p>	<p><input type="checkbox"/> Reduces costs a large amount <input type="checkbox"/> Reduces costs moderately <input type="checkbox"/> No impact on costs <input type="checkbox"/> Increases costs moderately <input type="checkbox"/> Increases costs a large amount</p>

	<input type="checkbox"/> I don't know
28. Optional comment on how the agency's use of third-party consultants impacts construction costs:	
29. How would you rate the quality of the employees at the state department of transportation?	<input type="checkbox"/> Very low quality <input type="checkbox"/> Moderately low quality <input type="checkbox"/> Neither low nor high quality <input type="checkbox"/> Moderately high quality <input type="checkbox"/> Very high quality <input type="checkbox"/> I don't know
30. Please describe your experience with the employees at the state department of transportation.	Please describe: <input type="checkbox"/> Not enough experience to say
31. Are you aware of any of these types of corruption in your state? <i>Select all that apply.</i>	<input type="checkbox"/> Bidder collusion <input type="checkbox"/> Unethical contractor behavior <input type="checkbox"/> Improper state employee behavior <input type="checkbox"/> Other, please describe: <input type="checkbox"/> None of the above
32. How large of a problem would you rate corruption?	<input type="checkbox"/> Very large <input type="checkbox"/> Somewhat large <input type="checkbox"/> Neither large nor small <input type="checkbox"/> Somewhat small <input type="checkbox"/> Very small <input type="checkbox"/> I don't know
33. Does corruption drive away bidders?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> I don't know Optional comment:
34. Does corruption drive up costs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> I don't know
35. Please add any additional comments you have about corruption.	
36. Please add anything else that you would like to say about aspects of the procurement and administrative process that increase the cost that the government pays for highway construction projects.	
37. Was anything confusing about the survey? If so, please explain.	

Thank you very much for completing the survey!

We sincerely appreciate your contribution.

If you are comfortable, please forward the survey email to others who you think would be able to answer the questions you are unable to answer.