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 procurement or construction official for your state DOT. We are asking these questions to officials 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. Phone number:	
2. Email:	
3. Job title:	
4. State:	
5. Opt in to receive results	☐ Yes, please email me analysis of results after data have been compiled

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

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

1. What do you think are the main aspects of the procurement and administrative process of highway construction that increase construction costs?	
2. Which of the following most accurately describes the state department of transportation?	☐ Severely understaffed ☐ Moderately understaffed ☐ Appropriately staffed ☐ Moderately overstaffed ☐ Severely overstaffed ☐ I don't know
3. To what extent does environmental review in the project formulation phase typically slow project planning for a federal-aid-funded project similar to the one in the case study?	☐ No impact ☐ Moderate impact ☐ Large Impact ☐ I don't know
4. To what extent does environmental review in the project formulation phase increase costs over the course of the project?	☐ No impact ☐ Moderate impact ☐ Large Impact ☐ I don't know
5. If you wish, please add any additional comments about how environmental review impacts the speed and costs of construction.	
6. 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? *Select all that apply.* (a) How often does the agency use consultants to draw up project plans?	☐ Market analysis ☐ Standardized unit cost ☐ Project-specific technical drawings ☐ Feasibility study ☐ Similar projects from previous years ☐ Other, please explain: ☐ Very rarely (less than 10% of projects) ☐ Rarely (10-25%) ☐ Occasionally (26-50%) ☐ Often (51-90%) ☐ Very often (over 90%) ☐ I don't know
7. What information does the agency publish before bids are due? *Select all that apply.*	☐ Estimated contract value ☐ Estimated/standard unit costs ☐ Bid bond ☐ Number of bidders ☐ Identity of bidders ☐ Project plans ☐ Other, please describe: ☐ I don't know
8. How often are bidders disqualified at the prequalification stage?	☐ There is no prequalification process ☐ Very rarely (1-10% of bids) ☐ Rarely (10-25%) ☐ Occasionally (26-50%)

	☐ Often (51-90%) ☐ Very often (over 90%) ☐ I don't know
9. What are some common reasons for disqualification in the prequalification stage? *Select all that apply.*	☐ No prequalification process ☐ Insufficient bid bond ☐ Past performance ☐ Technical error ☐ Firm has wrong specialty ☐ Other, please explain: ☐ I don't know
10. How often does the agency do outreach to increase the bidder pool for highway construction projects?	☐ Never ☐ Very rarely (1-10% of bids) ☐ Rarely (10-25%) ☐ Occasionally (26-50%) ☐ Often (51-90%) ☐ Very often (over 90%) ☐ I don't know
11. Does the legal framework establish criteria to identify unrealistically low (or mathematically unbalanced) bids?	☐ Yes ☐ No If yes, please describe the criteria: ☐ I don't know
12. How often are bids declared mathematically unbalanced? *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.* (a) What share of such bids are rejected?	☐ Never ☐ Very rarely (1-10% of bids) ☐ Rarely (10-25%) ☐ Occasionally (26-50%) ☐ Often (51-90%) ☐ Very often (over 90%) ☐ I don't know ☐ Very rarely (less than 10% of bids) ☐ Rarely (10-25%) ☐ Occasionally (26-50%) ☐ Often (51-90%) ☐ Very often (over 90%) ☐ Not Applicable ☐ I don't know
13. How often are bids declared materially unbalanced? *Note: a bid is materially unbalanced if there is a reasonable doubt that award to the bidder submitting the mathematically unbalanced bid will result in the lowest ultimate cost to the Government.* (a) What share of such bids are rejected?	☐ Never ☐ Very rarely (1-10% of bids) ☐ Rarely (10-25%) ☐ Occasionally (26-50%) ☐ Often (51-90%) ☐ Very often (over 90%) ☐ I don't know ☐ Very rarely (less than 10% of bids) ☐ Rarely (10-25%) ☐ Occasionally (26-50%) ☐ Often (51-90%) ☐ Very often (over 90%) ☐ Not Applicable ☐ I don't know

14. 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?	☐ Yes, always ☐ Yes, but only upon request of the bidder ☐ No, the excluded bidder will be notified directly in the contract award ☐ Other (please explain) ☐ I don't know
15. 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**? *Please include the time for the winner to submit relevant documents and the time to sign the contract.*	Number of days: ☐ I don't know
16. Does the contractor need to obtain work permits or other administrative authorizations **between public notice of award and contract signing**? *Please include environmental permits, occupancy permits, activity permits, etc. as applicable.*	☐ Yes, please list them: ☐ No ☐ I don't know
17. In your experience, how many change orders would a contract like the one described in the case study typically have?	☐ I don't know
18. If the contract was for a design-build project, how many change orders would it typically have?	☐ I don't know
19. According to the legal framework, is there a percentage (or level) of material usage above the engineer's estimate that automatically triggers a change order?	☐ Yes (please enter the percentage): ☐ No ☐ I don't know
20. Are the results of change orders made publicly available?	☐ Yes, within a month ☐ Yes, in longer than a month ☐ No ☐ I don't know
21. 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?	Number of days: ☐ I don't know
22. For contracts like the one in the case study, how often do you suspect that bidders submit unrealistically low bids to win the contract, confident of having a possibility to renegotiate at a later stage?	☐ Very rarely (less than 10% of bids) ☐ Rarely (10-25%) ☐ Occasionally (26-50%) ☐ Often (51-90%) ☐ Very often (over 90%) ☐ I don't know
23. How often is the construction project delivered by the original deadline?	☐ Very rarely (less than 10% of projects) ☐ Rarely (10-25%) ☐ Occasionally (26-50%) ☐ Often (51-90%) ☐ Very often (over 90%) ☐ I don't know

24. If a project is delayed, what are usually the main reasons? *Select all that apply.*	☐ Weather shocks (natural disasters, flooding, etc.) ☐ Burdensome administrative processes within the agency ☐ Capacity of the agency (staff/skills/budgetary constraints) ☐ Capacity of the contractor (technical/managerial constraints) ☐ Financial constraints of the contractor ☐ Planning on the agency side (incomplete project specifications, etc.) ☐ Change of project scope ☐ Legal challenges by citizens' groups ☐ Third party delays related to utilities or railroad coordination ☐ Covid-related supply shortages ☐ Other, please explain: ☐ I don't know
25. How often are construction projects that are comparable to the case study delivered within the awarded amount?	☐ Very rarely (less than 10% of projects) ☐ Rarely (10-25%) ☐ Occasionally (26-50%) ☐ Often (51-90%) ☐ Very often (over 90%)
26. If a project has a cost overrun, what are usually the main reasons? *Select all that apply.*	☐ Market conditions (changes in input prices, fluctuations in exchange rate, etc.) ☐ Weather shocks (natural disasters, flooding, etc.) ☐ Burdensome administrative processes within the agency ☐ Capacity of the agency (staff/skills/budgetary constraints) ☐ Capacity of the contractor (technical/managerial constraints) ☐ Financial constraints of the contractor ☐ Planning on the agency side (incomplete project specifications, etc.) ☐ Change of project scope ☐ Legal challenges by citizens' groups ☐ Third party delays related to utilities or railroad coordination ☐ Covid-related supply shortages ☐ Other, please explain: ☐ I don't know
27. For a contract like the one described in the case study, how many days would pass on average **between contract signing and receipt of a notice to proceed with construction**?	Number of days: ☐ I don't know
28. Does the contractor need to obtain work permits or other administrative authorizations **between contract signing and receipt of a notice to proceed with construction**? *Please include*	☐ Yes, please list them: ☐ No ☐ I don't know

environmental permits, occupancy permits, activity permits, etc. as applicable.	
29. Are there any labor and/or subcontracting requirements that increase costs?	☐ Disadvantaged Business Enterprise Program requirements ☐ Minority and Women Owned Business Enterprise Program requirements ☐ Limits on share of project that can be subcontracted ☐ Local hiring requirements ☐ Union construction workers ☐ Other: ☐ I don't know
30. How does the agency's use of third-party consultants impact construction costs?	☐ Reduces costs a large amount ☐ Reduces costs moderately ☐ No impact on costs ☐ Increases costs moderately ☐ Increases costs a large amount ☐ I don't know
31. Optional comment on how the agency's use of third-party consultants impacts construction costs:	
32. How would you rate the quality of the employees at the state department of transportation?	☐ Very low quality ☐ Moderately low quality ☐ Neither low nor high quality ☐ Moderately high quality ☐ Very high quality ☐ I don't know
33. Please describe your experience with the employees at the state department of transportation.	Please describe: ☐ Not enough experience to say
34. Are you aware of any of these types of corruption in your state? *Select all that apply.*	☐ Bidder collusion ☐ Unethical contractor behavior ☐ Improper state employee behavior ☐ Other, please describe: ☐ None of the above
35. How large of a problem would you rate corruption?	☐ Very large ☐ Somewhat large ☐ Neither large nor small ☐ Somewhat small ☐ Very small ☐ I don't know
36. Does corruption drive away bidders?	☐ Yes ☐ No ☐ I don't know Comment:
37. Does corruption drive up costs?	☐ Yes ☐ No

	☐ I don't know
38. Please add any additional comments you have about corruption.	
39. 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.	
40. 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.