Industry Capacity and Cost Escalation Study

Impact of the Senate Bill 1 funding on future Caltrans construction projects cost.

WHAT IS THE NEED?

Caltrans delivers a large construction program on an annual basis. With passage of Senate Bill 1 (SB-1) in 2017, the Caltrans program is expected to increase significantly with a similar increase in the program by local agencies. With the increased funding comes increased oversight and accountability. Caltrans needs to better understand the impact of this additional work on future construction costs in order to provide better cost estimates on projects.

WHAT ARE WE DOING?

With passage of Senate Bill 1 (SB-1) in 2017, the Caltrans program is expected to increase significantly with a similar increase in the program by local agencies. With the increased funding comes increased oversight and accountability. Caltrans needs to better understand the impact of this additional work on future construction costs in order to provide better cost estimates on projects. The scope below is intended to assist Caltrans in understanding the impacts of the increased work on competition and availability of materials as well as their impact on costs.

Competition:
Caltrans would like to assess the impact of the SB-1 funding on contractor competition. In particular Caltrans would like to know the following:

1. Does the contracting industry in California have the capacity to bid and bond the volume of work anticipated over the next 10 years?
2. How can Caltrans best bundle (e.g. size) its project to
maximize the number of bidders on its projects? That is, maximize use of all sizes of contractors and subcontractors (small, medium, and large contractors).

3. How can Caltrans meter its advertising to maximize the number of bidders on its projects?

4. Are there sufficient Disadvantaged Business Enterprises (DBEs), Small Businesses (SBs), and Disabled Veteran Business Enterprises (DVBEs) to meet state and federal goals?

Materials:

Caltrans would like to assess the impact of the SB-1 funding on material availability. In particular, Caltrans would like to know the following:

1. Is there sufficient aggregate availability for asphalt concrete, Portland cement concrete, aggregate base and aggregate subbase for Caltrans projects?

2. How will aggregate availability affect the pricing of asphalt concrete, Portland cement concrete, aggregate base and aggregate subbase on Caltrans projects?

3. How will steel demand affect the price of steel on Caltrans projects?

4. Is there sufficient capacity at asphalt plants to meet the demand of Caltrans projects for asphalt concrete?

5. For each of the previous items, are there geographic disparities in availability that could affect pricing on a geographic basis?

Escalation:

1. Are there any existing indices (e.g. ENR highway construction cost index) which can predict with some accuracy escalation on Caltrans construction costs?

2. Is there an existing data set which can act as a leading indicator for highway construction cost (e.g. housing starts)?

3. Can the existing California Highway Construction Cost Index (CHCCI) be used to develop a methodology for predicting future construction costs?

4. Can the existing CHCCI be modified to develop a methodology for predicting future construction cost?

5. Can Caltrans historical bid data be used to predict future construction costs for various bid items?

Workforce:

1. Are there sufficient skilled workers available for the construction industry in California?

2. How will a shortage of skilled workers affect Caltrans Projects?

3. How will trucking availability affect materials delivery and Caltrans projects cost?

4. How will Caltrans' changing workforce (retirement and new hires) affect Caltrans' capacity to deliver project as needed?

WHAT IS OUR GOAL?

The objective of this project is to assess the impact of Senate Bill 1 on competition, materials, and associated costs on Caltrans projects.

WHAT IS THE BENEFIT?

The benefit is better understanding on the impact of this additional work as a result of Senate Bill 1 additional funding in the Caltrans workflow on future construction costs in order to provide better cost estimates on projects.

WHAT IS THE PROGRESS TO DATE?

- Consultant delivered final draft report to the project panel
- Task close-out process pending