

# Peas and Pods – Five New Reasons for Owners To Use QBS (Qualifications-Based Selection)



Jeffrey Beard  
ACEC Vice President  
Theron Roschen, PE  
Jacobs/Carter & Burgess  
Public Works Congress  
August 17, 2008

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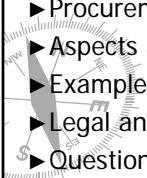
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## Introduction and Overview

- ▶ Motivation for today's presentation
- ▶ Perspectives of the Presenters
- ▶ The ACEC – APWA National QBS Study
- ▶ Procurement and Project Delivery
- ▶ Aspects and Findings of the Study
- ▶ Examples of Process Using QBS
- ▶ Legal and Technical Issues if QBS is Not Used
- ▶ Questions and Answers



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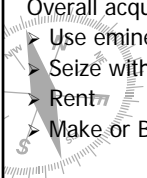
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## Procurement and Project Delivery

“Acquisition is to project delivery as procurement is to purchasing.”

Overall acquisition:

- ▶ Use eminent domain or condemnation
- ▶ Seize with legal force (police or military)
- ▶ Rent
- ▶ Make or Buy



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### Aligning Project Delivery with Procurement (Buying Services & Goods)

- ▶ Choose a project delivery system
- ▶ Agree on methods for selecting (or if you prefer, procuring) A/Es and Constructors
- ▶ Use solicitation formats that fit the acquisition plan
- ▶ Use contracts that fit the acquisition plan (commercial terms and liability provisions are key aspects)

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### Project Delivery Options

- ▶ Design-Bid-Build
- ▶ Design-Contract-Build (Design Assist)
- ▶ Construction Mgt At Risk
- ▶ Design-Build with Concept
- ▶ Direct Design-Build with Performance Requirements
- ▶ Finance-Design-Build-Operate
- ▶ Build-Own-Operate-Transfer
- ▶ Integrated Delivery (Aussies; AIA; Others)

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### Selection/Procurement Options

- ▶ Low Bid (low first cost)
- ▶ Adjusted Low Bid
- ▶ Best Value Source Selection with Unilateral Choice
- ▶ Best Value Source Selection with Bilateral Negotiations
- ▶ Qualifications-Based Selection
- ▶ Sole Source

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## Solicitation Format

- ▶ IFB – Invitation for Bid
- ▶ RFP – Request for Proposal
- ▶ RFQ – Request for Qualifications
- ▶ Direct Sole Source Selection

Response to solicitations from "Bidders,"  
"Proposers," or "Offerors" --  
through open competition

## Contracts -- Commercial Terms

- ▶ Fixed Price Lump Sum
- ▶ Guaranteed Maximum Price
- ▶ Cost Plus Fee
- ▶ Cost Reimbursable
- ▶ Unit Price/Time and Material

Key Component – What detail of pricing is revealed  
to owner, and how upset price is capped

## Alignment of Project Delivery Choice with Procurement Options (example)

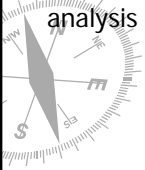
### Design-Bid-Build

- ▶ QBS for Design Entity; Low Bid for Constructor
- ▶ RFQ for Design Solicitation; IFB for Constructor
- ▶ Cost Plus Fee Contract for Designer; Fixed Price Lump Sum Contract for Constructor

*QBS may also be used for selecting entities in  
other delivery systems, such as for CM at Fee  
or At Risk, or Integrated Design-Build Team*

## The ACEC – APWA National QBS Study

- ▶ Analysis of QBS impact
- ▶ Conducted by University of Colorado and Georgia Tech
- ▶ Traditional and Social Factors – A Complete analysis of QBS impact



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## Motivation

- ▶ Time to have a quantitative analysis of QBS effectiveness
- ▶ Outside challenges to QBS
- ▶ Independent analysis of QBS impact
- ▶ National in scope



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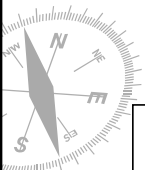
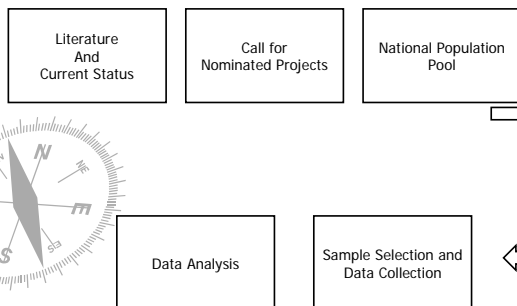
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## Methodology



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## Population – Starting Group

- 195 Projects
- 37 States
- \$100,000 to \$10,000,000 in design fees
- Completed within the last 7 years
- All sectors of projects
- QBS and non-QBS projects



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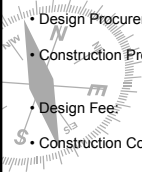
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## Sample – Final Group Responses

### 47 Projects

- Owner Type:
  - Public – 95% Private – 5%
- Project Type:
  - Transportation – 44% Water – 39%
  - Commercial – 15%
  - Industrial – 2% Land Development – 0%
- Delivery System:
  - Design-Bid-Build – 90% Design-Build – 5%
  - Other – 5%
- Design Procurement Process:
  - QBS – 78% Best Value – 10%
  - Low-Bid – 5% Sole Source – 7%
- Construction Procurement Process:
  - QBS – 12% Best Value – 17%
  - Low Bid – 59% Sole Source – 2%
  - Other – 10%
- Design Fee:
  - Minimum – \$2,500 Maximum - \$9,000,000
  - Median - \$441,500
- Construction Cost:
  - Minimum - \$25,000
  - Maximum - \$900,000,000
  - Median - \$4,500,000



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## The Findings

- ▶ QBS is a positive benefit to owners and design firms –
- ▶ Take a look



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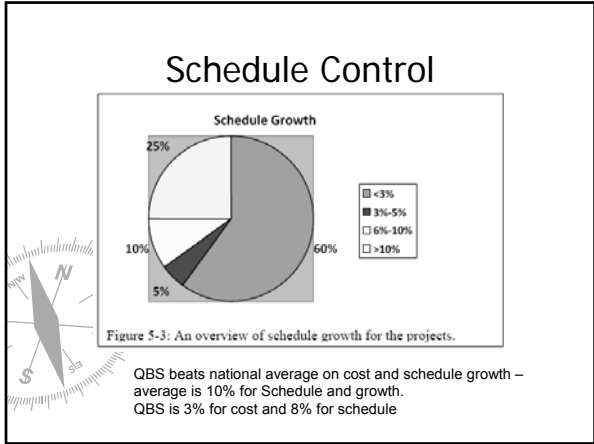
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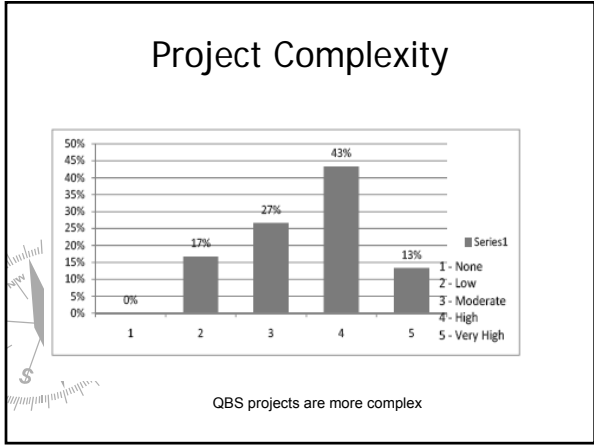
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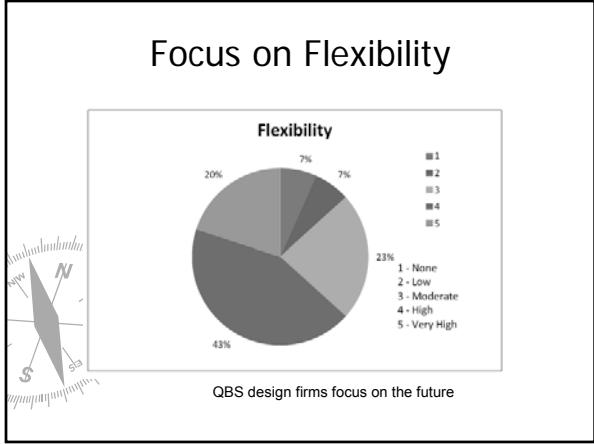
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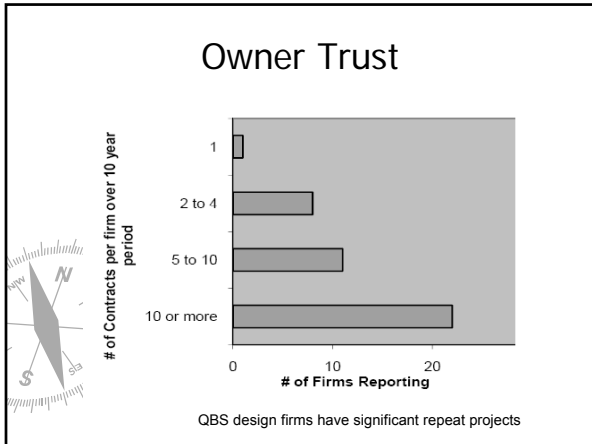
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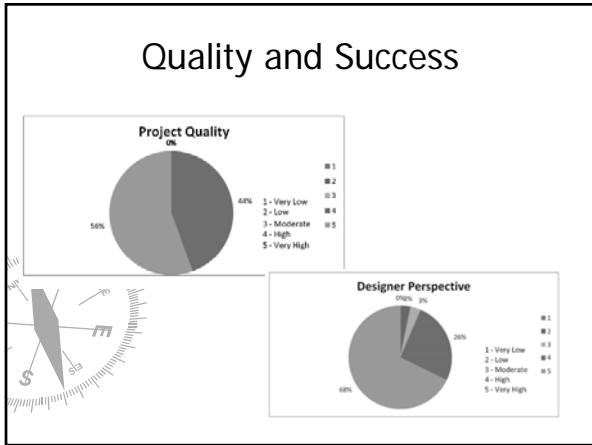
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- ### Summary
- ▶ Better Cost and Schedule Control
  - ▶ Addresses Complexity
  - ▶ Significant Return of Owner Business
  - ▶ Strong Trust
  - ▶ Excellent Quality and Success Ratings
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## Outcomes of the Study

- ▶ Traditional project benefits plus “five new reasons” for owners to use QBS:
  - Ensures Competitiveness
  - Allows for incomplete scope
  - Protects Intellectual Property
  - Addresses Societal Issues
  - Enhances process and product effectiveness
- ▶ Retains the focus on traditional issues while adding a focus on the future



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## ACEC & APWA National QBS Study



Contact:  
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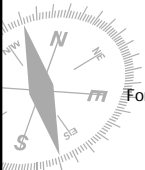
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## Use of Consultants for Project Delivery --



### A Local Perspective on QBS

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## County Program

Staff of 36 engineers and technicians  
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"We do it better, cheaper and faster", But...



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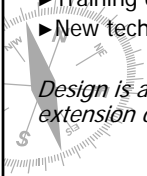
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## Why Public Owners Use Qualifications-Based Selection

- ▶ Risk assignment
- ▶ Complex or basic work
- ▶ Training of inexperienced staff
- ▶ New technologies – ITS



*Design is a collaborative process – view as  
extension of staff*



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Pre-qualification lists of consultants for design of roadway, bridge, traffic signal and landscaping projects



Widely advertised

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Consultant firms were allowed to submit SOQs for the following categories:

- Roadway Design Tier I, (less than \$150K– Director)
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- Provide list of candidate projects

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▶ 1/3 Maintenance

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▶ Tiered approach allows firms more suitable for project's needs, business competition and encourages small businesses

▶ 39 different firms submitted a total of 62 SOQs

▶ Last 2 years awarded 13 contracts to 9 different firms. Approximately \$6 million in consultant fees

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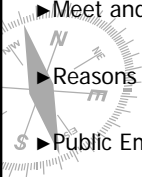
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## County Program

- ▶ Section 71-J of the Sacramento County Charter
- ▶ Meet and Confer
- ▶ Reasons of Economy and Efficiency
- ▶ Public Employees Union




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## SOQ Ranking Criteria:

- ▶ Assemble diverse panel at all levels with independent members
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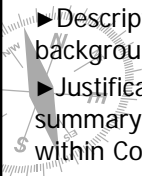
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## SOQ Format and Evaluation Criteria

- ▶ 10 pages 2-sided
- ▶ Contact Information
- ▶ Description of the consulting team background and organization chart
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## SOQ Ranking Criteria:

- ▶ Look for good communication and problem solving skills
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- ▶ (4) Reference response with questionnaire: Key staff, Meeting of schedule, Staying within budget, Would you use again?

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## We Have a Project!

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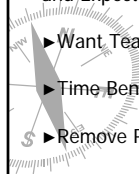
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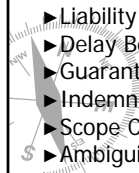
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## When QBS is not Used

- ▶ Sole Source
- ▶ Amendments for later phases
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# Use of Consultants for Project Delivery -- A Local Perspective on QBS



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916-929-3323  
THANK YOU!

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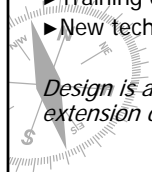
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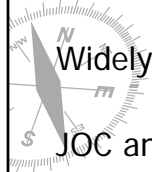
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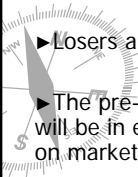


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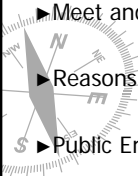
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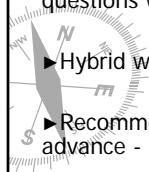
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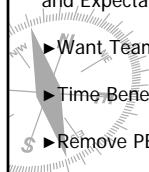
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