

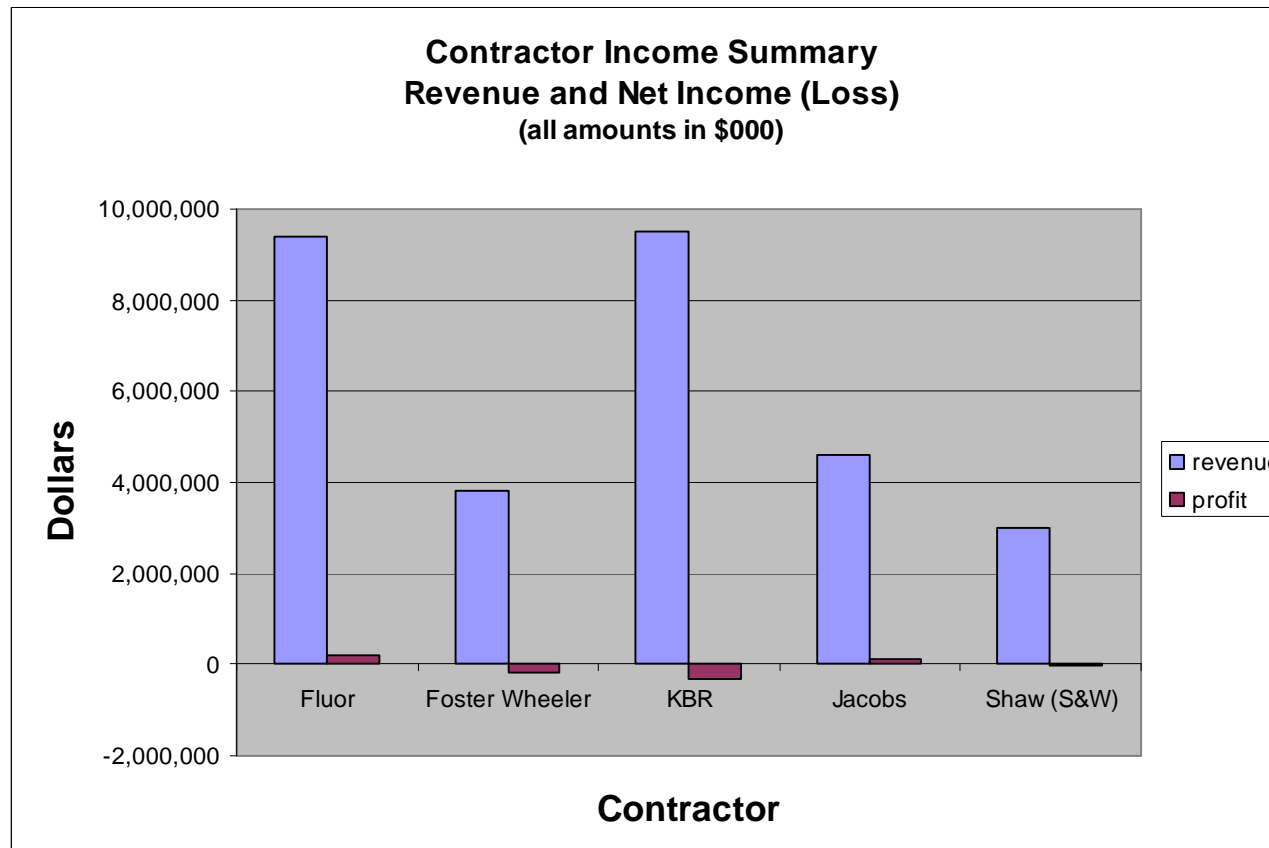
NWCCC

Improving the Design Process
An Engineer's Perspective

Industry Trends

- Industry striving to improve project execution and cost performance
- Owners looking to shift risk to Contractors
- Owners seeking to squeeze Contractor's profit margins (evaluations based on price rather than value even reverse auctions)

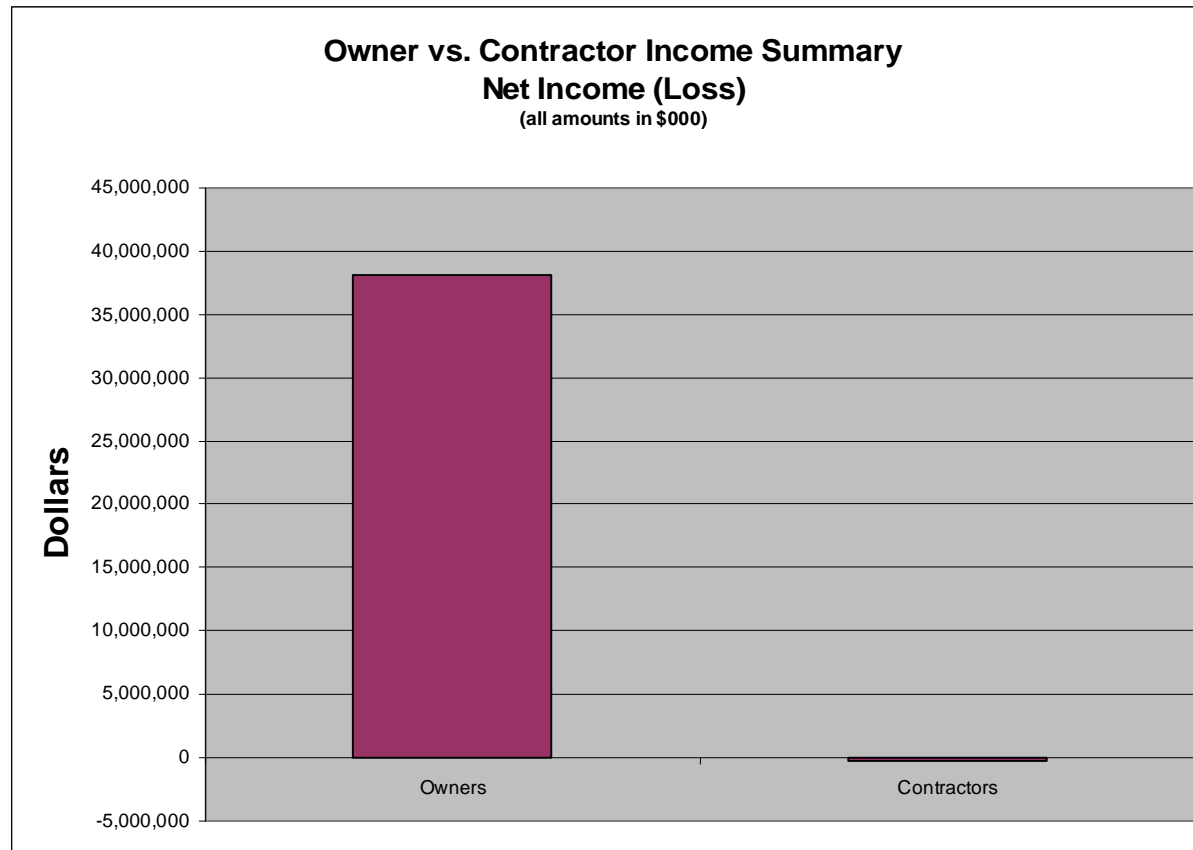
Who is best positioned to carry risk?



Who is best positioned to carry risk?

- Five of the largest American EPC companies had a combined loss of over \$200 million on \$30 billion in revenue.
- The big five Owners in NWCCC had a combined profit of over \$30 billion.

Who is best positioned to carry risk?



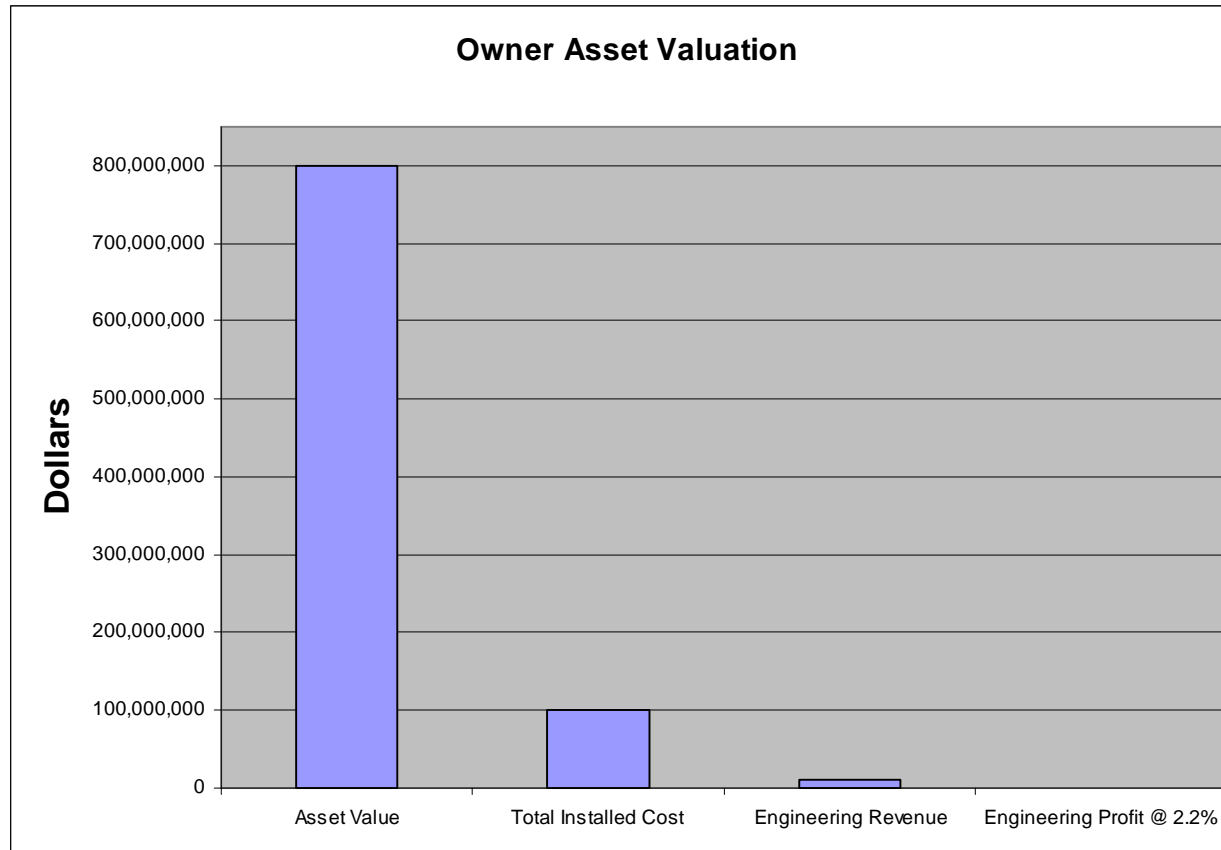
How much can Contractor Profits be squeezed?

- Stone & Webster, Rust, Stearns & Rogers, CF Braun, Rust, Kellogg, Foster Wheeler; they have either been gobbled up after financial disasters or are about to be.
- Parsons, Mustang, NEPCO recently acquired by foreign firms

Is there a better way?

- Driving down margins eliminates the ability to acquire, train and retain competent staff.
- Go local, build/support a technical team that will serve you in the future.

Chase the Real Money



Focus on the real money

- Choose the RIGHT project - Over it's 30 year life, a project with a TIC of \$100 million should earn \$800 million for the Owner. The design will cost \$11 million and the contractor will be lucky to make a 2% profit or \$0.22 million. Focus on the big number!
- Define the scope upfront (don't build the house without a solid foundation).
- Incentive the Contractor (align financial motives with Owner)
- Fire your lawyers, revise the contractual language to eliminate Contractor Risk and save the E&O insurance. Insurance costs are often greater than the Profits generated by the most successful contractors.