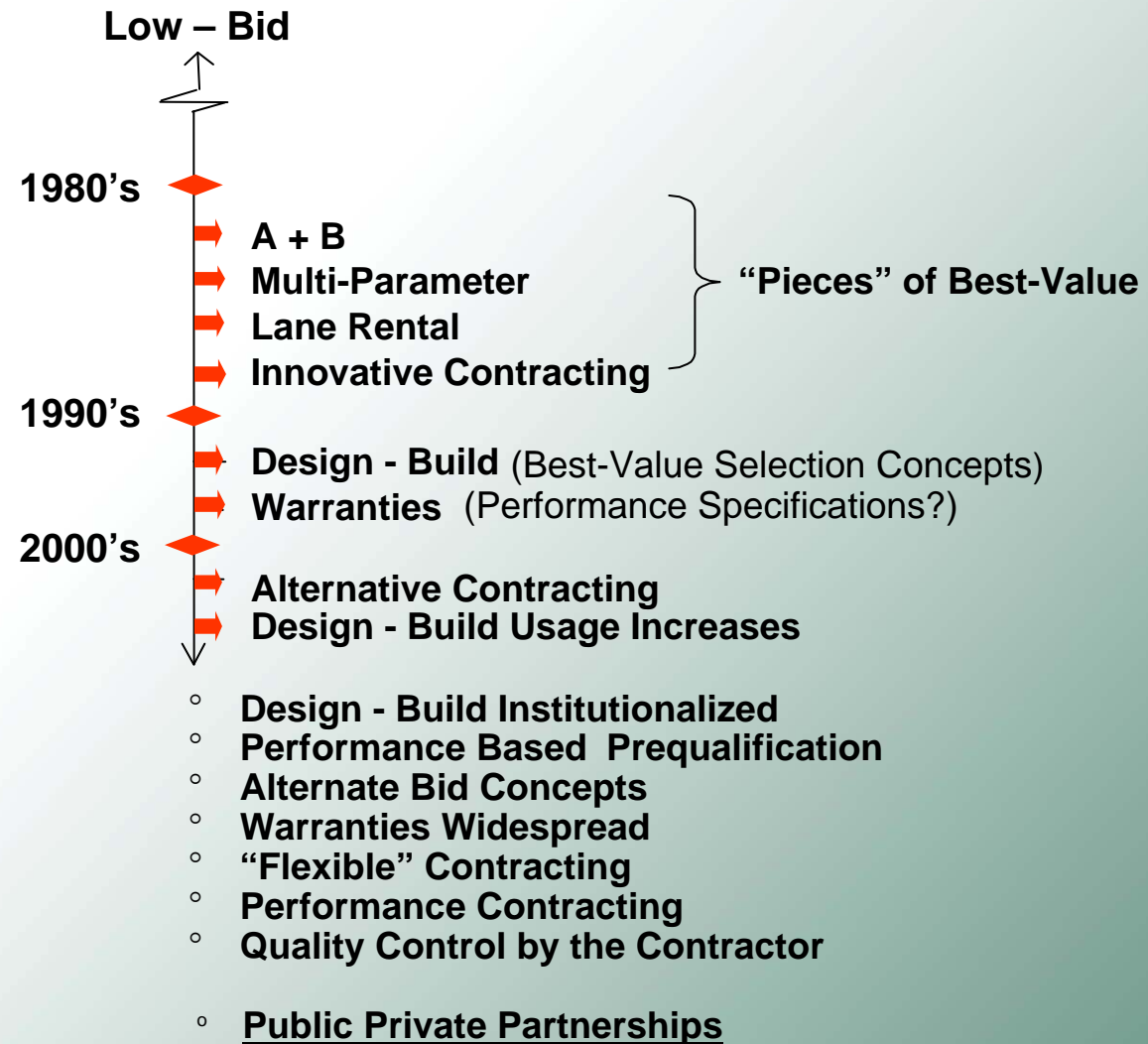


A Changing View of Construction Management

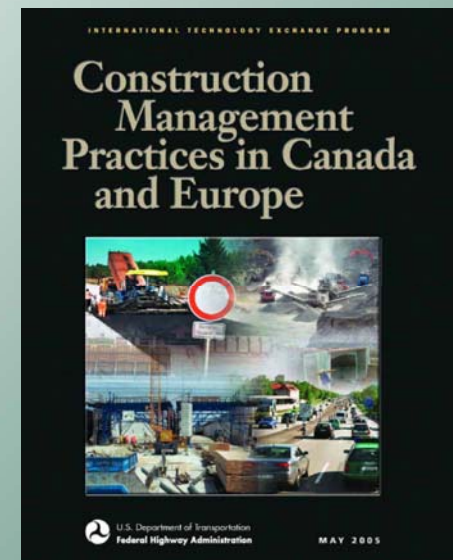
Steven D. DeWitt, PE
Chief Engineer
North Carolina Turnpike Authority

4 Years Ago...



Scan Focus

- International CM Procedures
- Focus Toward Ensuring Project Delivery (Doing "our" Part)
- Contract Compliance
- Quality Assurance









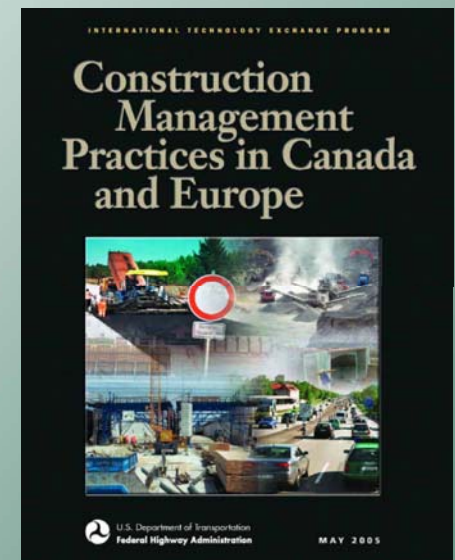






Scan Focus

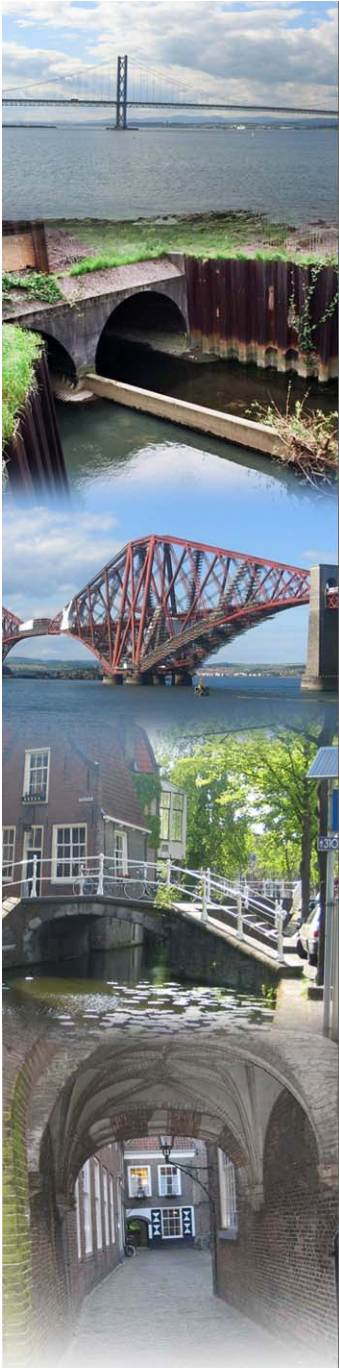
- International CM Procedures
- *Focus Toward Ensuring Project Delivery (Doing "our" Part)*
- Contract Compliance
- Quality Assurance





What we saw...

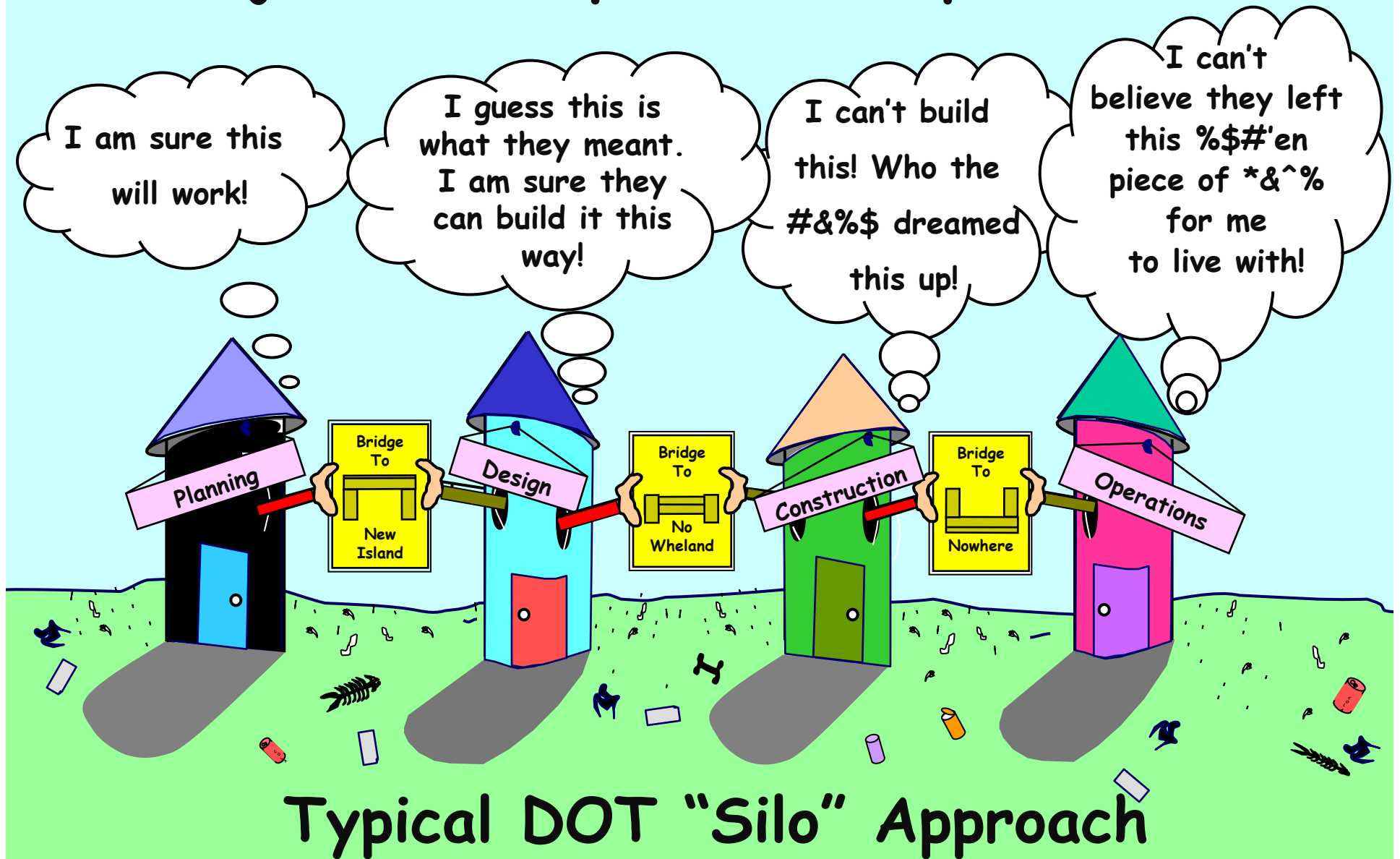
- **CM Systems that Align Goals**
- **“Construction Thinking” in Project Development**
- **Strong Risk Analysis Techniques & Appropriate Transfer**
- **Strategic Use of “Alternative Delivery Methods” - set the Framework for Success**
- **Delegation of Traditional Highway Agency Functions that Promote Efficiency**
- **A Philosophy of Network Management**
- **Great Partnership b/w Public & Private Entities**

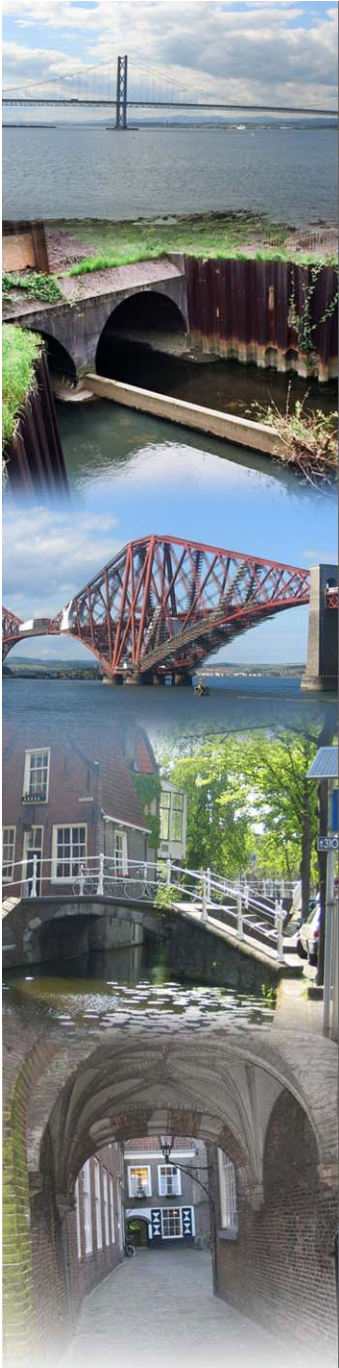


A Changing View...

- What is Project Delivery?
- What Is CM?

Project Development & Implementation

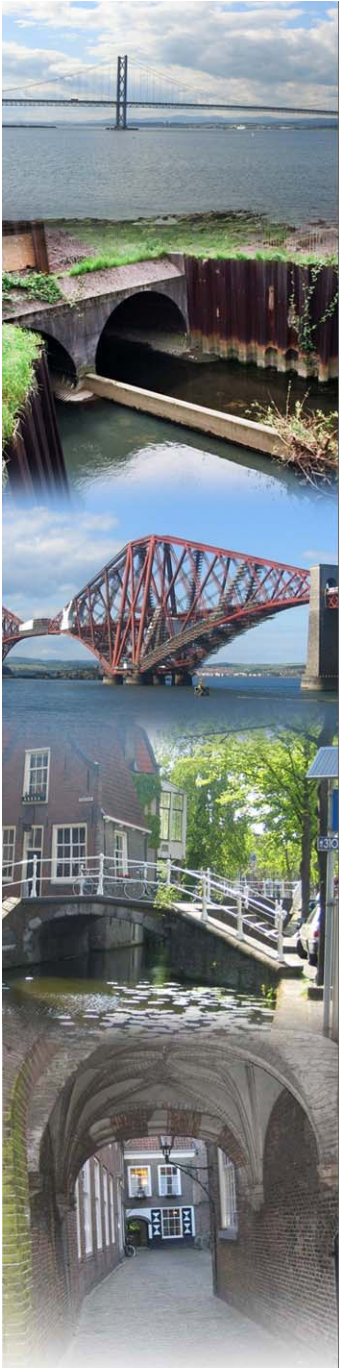




"Old" Definition of Project Delivery

If We Can Get a Project to the Letting We Will be Successful

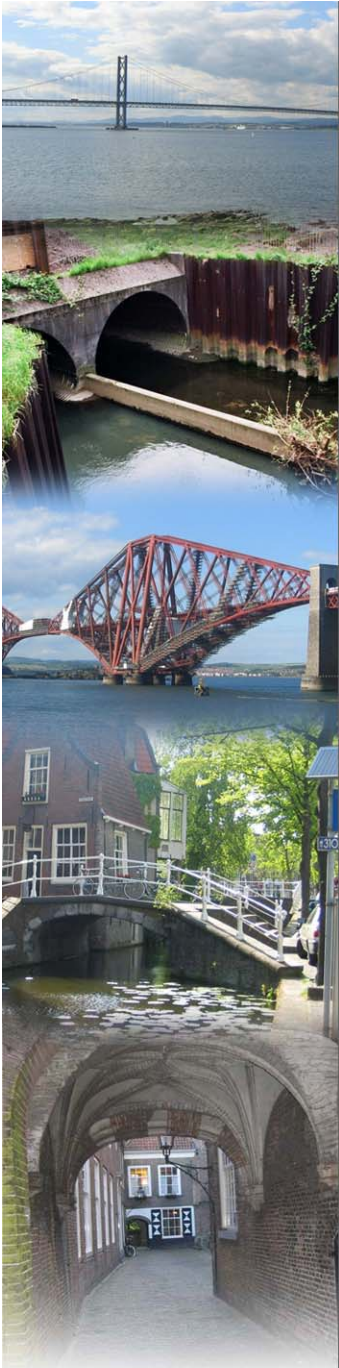
- Immense Pressure to Award Contracts Within a Given Timeline "No Matter What"
- Preconstruction Schedule Delays are Unacceptable
- Do "Whatever it Takes" to Get the Project to Letting



"New" Definition of Project Delivery

If We Can Get a Project Open to the Public We Will be Successful

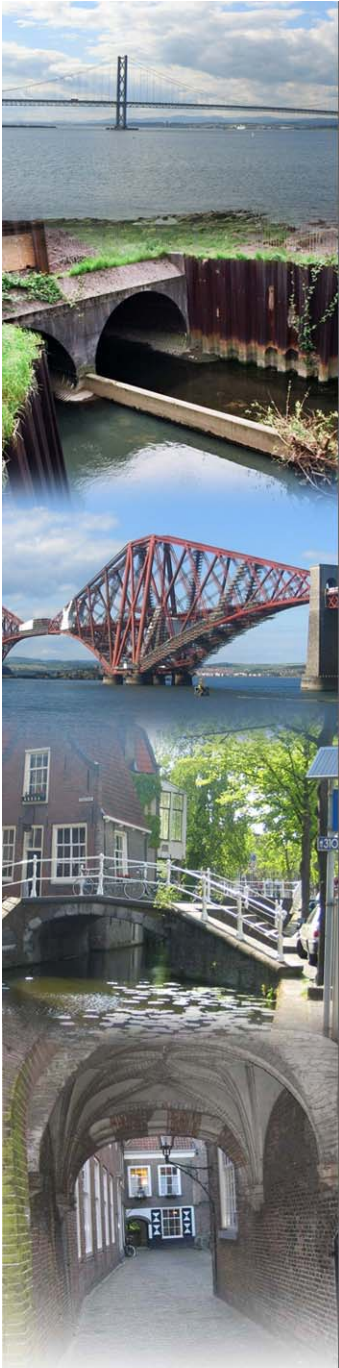
- A Delayed Letting Does Not Necessarily Mean Delayed Completion
- Delays During Construction are Unacceptable
- Do "Whatever it Takes" During Preconstruction to Ensure We Have Focused on Completion *and Beyond*



"Old" Definition of CM

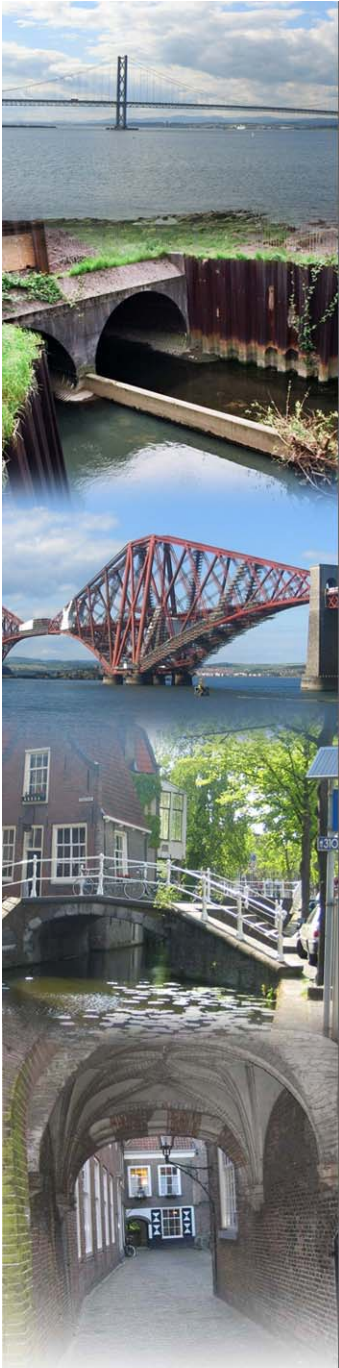
"Typical DOT Process"

Managing the Physical Construction of a Project After Award of a Contract to Ensure Quality, Safety, Cost, and Schedule Performance Expectations are Met Through Contract Administration Processes.



"New" Definition of CM

The totality of activities that address the management and technology aspects of highway construction, conducted during the planning, design, construction, and post-construction phases of a project for the purpose of achieving scope, quality level, cost, schedule and other project performance objectives.

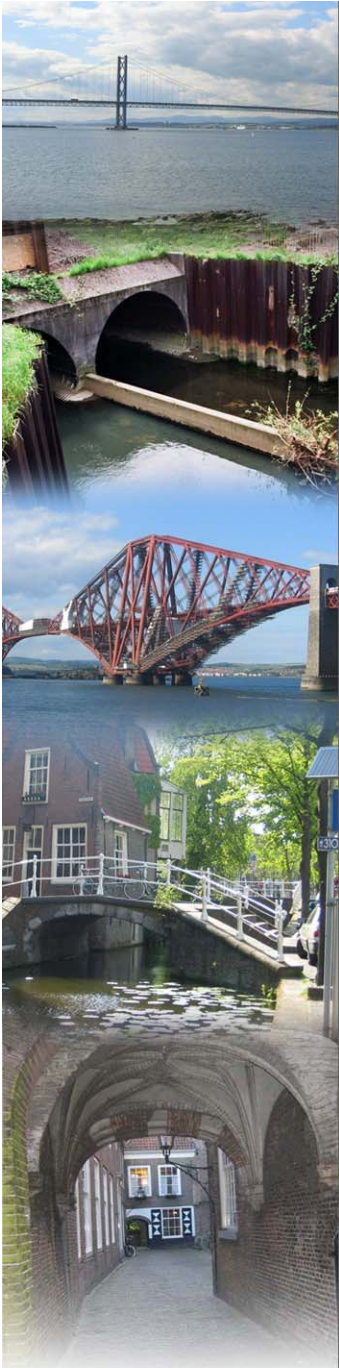


Over the Next 10 years...

Rising Expectations of Industry

- Higher Quality Standards
- Compressed Schedules
- More Environmental Responsibility
- Higher Proportion of Risks
- Take on More Typical Agency Activities

More Responsibility, More Accountability...

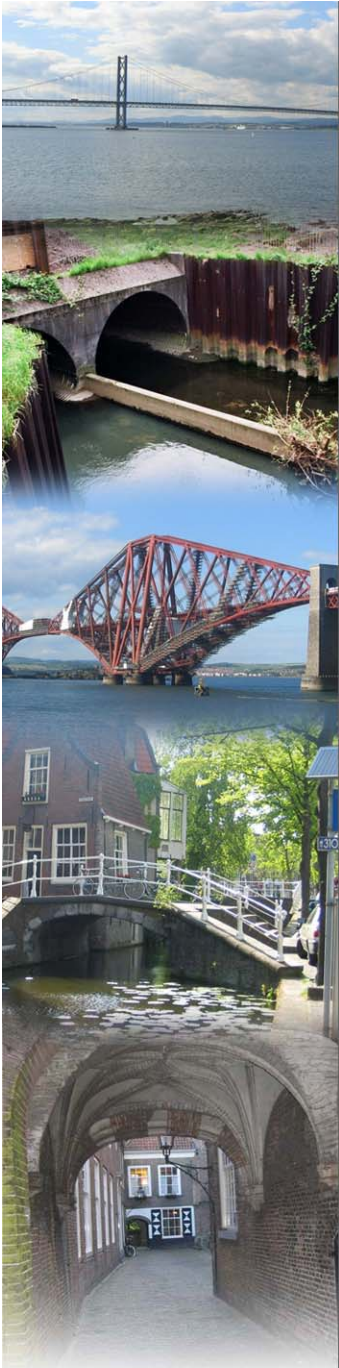


Over the Next 10 years...

Rising “Opportunities” of Industry

- **More Flexibility**
- **Allowances for Innovative Approaches**
- **Management Influence**
- **3rd Party Controls**
- **Less “Means & Methods”**

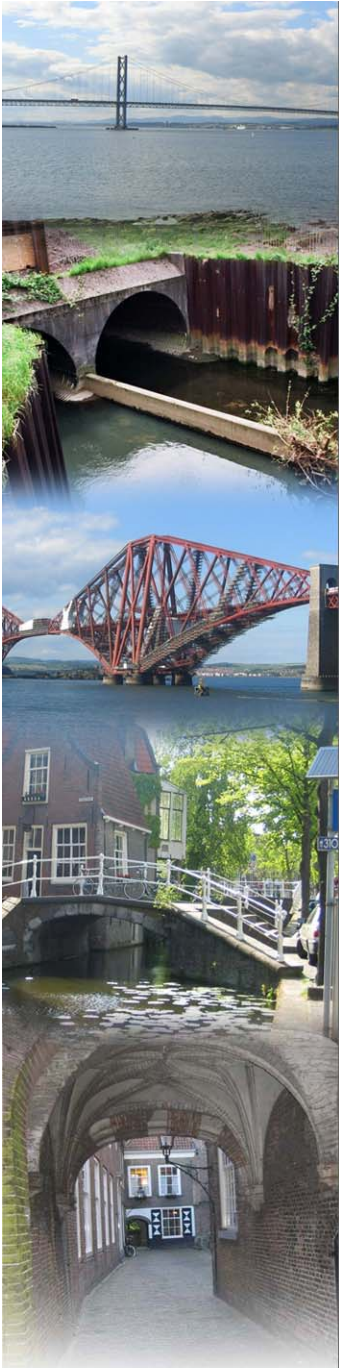
More in Control of Their Own Destiny?



Over the Next 10 years...

Agency “Evolution”

- Stronger Project Management - “Cradle to Grave”
- Downsizing
- Reprioritizing
- Effects of “Innovative” Financing
- Practical Design Applications



What has Changed Since 2004?

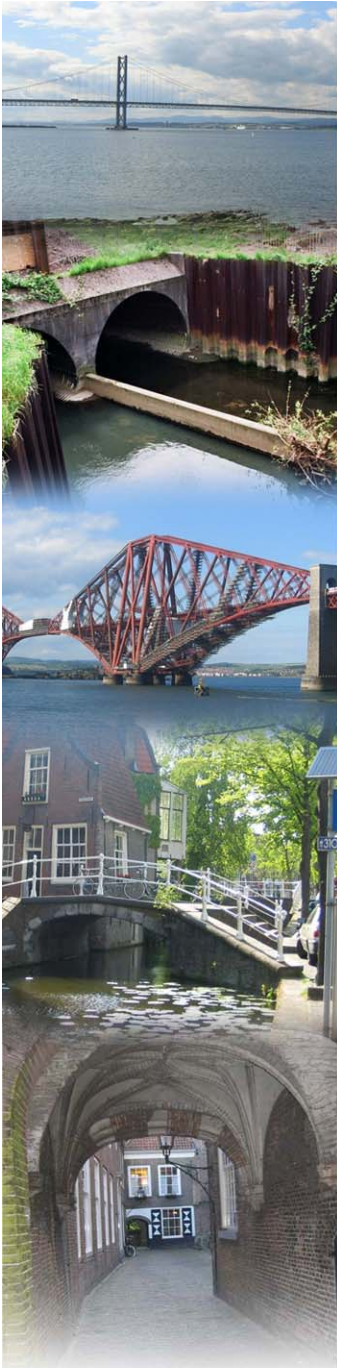
- I-35
- Crumbling Infrastructure Reports
- Inflation out of Control
- Urban Congestion
- Economy faltering
- The "Stimulus Blip"

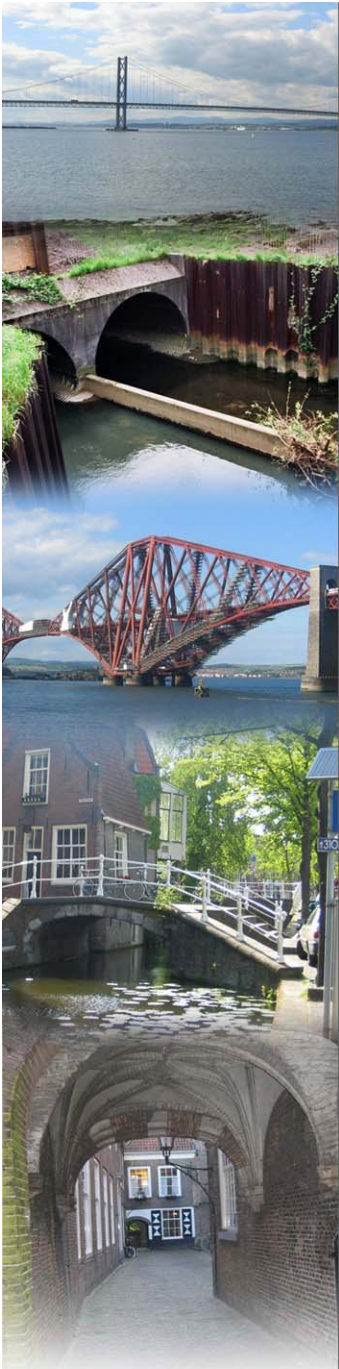
Scan concept of setting projects up for success even more important...

CM is Still About...

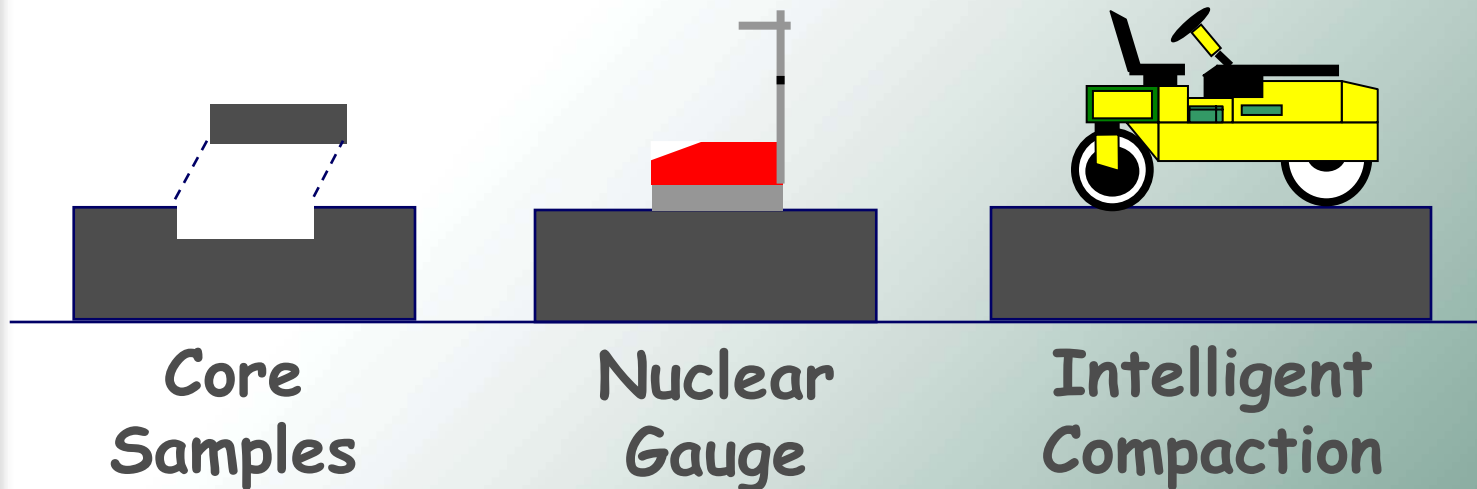
Construction

- Contract Administration
- Quality Assurance
- Quality Control
- Contract Provisions
- Training
- Experience
- Communication
- Etc...

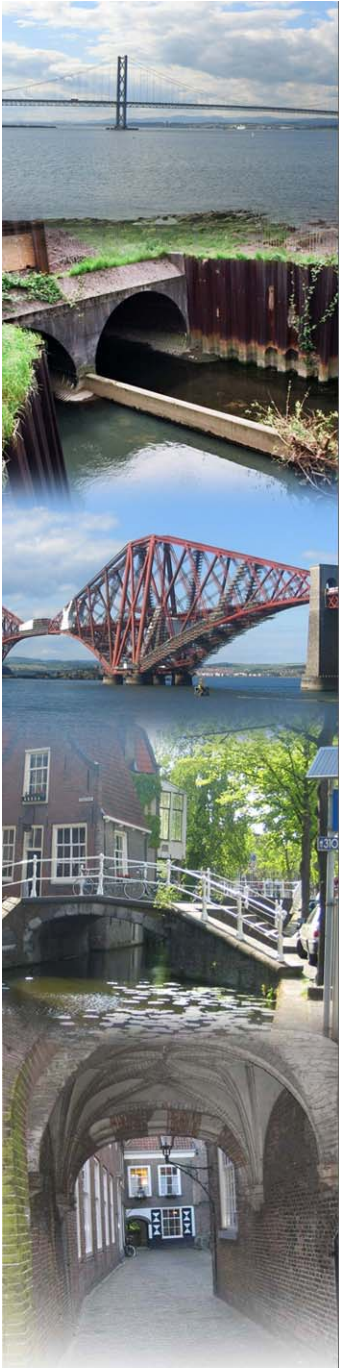




There May be a Change of Who or How...



However, Density is Still Density, it is Still Critical, and We Must Understand it, Assure it, and Ensure Accountably.



**However, CM is a
Whole Lot More...**

**Setting projects up for
success by keeping the
end in mind - from the
beginning!**

