STEM Teacher Roundtable
Construction Engineering and Management
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Pathways to STEM Careers

• My story
• STEM issues
• Encouraging students
• Diversity
• Advice to students
Duncan Stewart

- Bachelors in Engineering (Civil) Royal Military College of Canada
- Joined MBP in 1999
- Served as an Inspector, Engineer and Project Manager, Branch Manager, Service Executive
- Professional Engineer (PE)
- Certified Construction Manager (CCM)
- Planning and Scheduling Professional (PSP)
STEM Issues (Opportunities for Future Builders & Engineers)

Global Issues:
- Aging infrastructure
- Cost constraints
- Productivity
- Sustainability

Business Issues:
- Aging workforce
- Retention of talent
- Quality
- Technology
Encouraging Students

• Why Civil Engineering and Construction?
  – Institutional pride
  – Future problem solvers
  – Money
  – Security
  – Low barrier to entry
  – Established mentorship

Order of the Engineer Ring
Diversity

• Why it matters
  – It’s just good business
• Top down emphasis
  – CEO level priority
  – Make it OK to talk about it
• Networks within networks
  – Mentorship
  – Special groups (example - NAWIC)
Advice to Students

- Enjoy learning
- Remember that “It gets better”
- Get Involved
Resources for Teachers and Students

Local:
• https://www.chamberrva.com/programs/mission-tomorrow/
• http://ascoerichmond.org/popsicle-stick-bridge-contest/

College Student Chapters:
• https://www.agc.org/student-chapter-directory
• https://www.asce.org/find-a-chapter/
Questions?