



# ***Agile Roadmap Outbrief***

## ***Cost Estimating***





# Roadmap – Agile Value and Influence

- **How does Agile influence cost estimating?**

- **Benefits and Value**

- **Potential of reducing software defect rate, lessen sustainment cost**
- **Potential to reduce the number of incidents of massive cost growth**
- **Better integration of cost analysts and systems engineering**

- **Opportunities**

- **Forces cost community to rethink software estimating methods**
- **More schedule driven cost estimating methodology**

- **Challenges/Risks**

- **How do we evaluate proposals where one is Agile and one is not?**
- **Are the existing metrics going to work with Agile?**
- **Historical software databases may not be applicable**
- **Implementation Risk as experienced by both case studies**



# Roadmap – Agile Adoption

- **How will cost estimating adapt to Agile?**
  - Streamlining of acquisition process
    - Replacement of milestones with periodic reviews (delta IBRs / annual reviews)
    - Redefining the role of cost estimating in the acquisition process
  - Change management
    - Cost analysts will be embedded with the systems engineers
    - Evolving standard tools and methods
    - Better leverage cost estimator expertise
    - Improve how we perform cost-risk assessments
  - Customer involvement
    - Change to Real-time data availability
    - Better transparency between customer and developer



# Roadmap – Agile Adoption Continued

- **How will cost estimating adapt to Agile (continued)?**
  - Contract type, language, and incentives
    - Revise Basis of Estimate templates (section L & M of RFP) Agile-specific?
  - Effects on reporting or reporting requirements (CDRLs, metrics, IMS, etc.)
    - Opportunity for common set of financial and technical data, complete transparency through subcontractors. Improved data will improve cost estimating.
  - Risk management
    - Early detection of software growth, requirements validation, and scope
    - Better at monetizing risk
  - Culture change
    - Barriers between the cost community and the systems engineering
    - Move from SLOC–based cost estimating to ‘Story Points per Sprint’ method



# Roadmap – Policy and Guidance

- **Should policy or guidance be created or changed?**
  - Existing policy updates
    - Better cost and technical data collection (Awaiting SRDR Working group results)
  - Existing guidance updates
  - New policy
  - New guidance
    - Gather best practices



# Roadmap – Workforce

- **How should the Government and contractor workforce be trained or introduced to Agile?**
  - Conduct cost research (Determine what good Agile estimating looks like)
    - Challenge Universities, industry, FFRDCs, existing Agile working groups to rethink software cost estimating
      - Requires funding
      - Can't be worse than current approaches
    - Develop new Agile methodologies / Document case studies
  - Promulgate knowledge
    - Get International Cost Estimating and Analysis Association (ICEAA) to update their Cost Estimating Body of Knowledge (CEBOK)
    - Get DAU to develop or modify courses with new Agile methods
    - Update GAO cost estimating guide



# Roadmap – Way Forward

- **What are the next steps for cost estimating?**
  - **Rank what should be done in order of preference:**
    - Convene a cost-only summit to focus research and data collections efforts. Can be accomplished through existing cost forums such as Software IPT, Collaboration Cost Working Group, ICEAA conference, OSD working groups.
    - Agile in DoD second meeting
    - Meetings with leadership to present recommendations on behalf of the cost community
    - Policy / Guidance Changes
    - DAU / Training Updates
  - **Should OSD and/or the Services setup an Agile organization?**
    - **Agile is a methodology. We do not need an organization for methods.**
  - **Would your Area / Service / Agency benefit from OSD briefing them on Agile?**
    - **No. It is too early.**



# Questions?

