

5D BIM: Design Costs Analysis

Questions and Answers

Q: Corey, what program are you using for cost estimating from the model? [Gregory Nagel]

Q: What application is this cost model? [Soheila Dianati]

A: The third speaker was showing screen shots of Vico Office. [Donald Henrich]

Q: What was that AIA document number again? [Edward Lehman]

A: E202 [Andy Smith]

Q: Has anyone found a particular B.I.M. more advantageous for estimating? [James W. Barton]

A: When you have a plan on how you will use the various LOD's of the model it makes all LOD's useful. A key concept of the MPS is that LOD's can vary in one phase, such as the substructure can be at 400 while the interiors are still at 100 or 200. [Donald Henrich]

Q: LOD= level of development? Level of definition? Level of detail? What is the difference? [Kevin Connolly] The AIA E202 definition of LOD is LEVEL of DEVELOPMENT. Not definition!!!! Further, Development was carefully selected over the others to reflect the entire range of information that a model element can contain beyond concept of detail. Refer to the new E203 which is out for public comment and its accompanying guide which explains this important distinction. [Kevin Miller]

A: "ARTICLE 3 LEVEL OF DEVELOPMENT § 3.1 The following LOD descriptions identify the specific content requirements and associated authorized uses for each Model Element at five progressively detailed levels of completeness. Each subsequent LOD builds on the previous level and includes all the characteristics of previous levels. The parties shall utilize the five LOD described below in completing the Model Element Table at Section 4.3, which establishes the required LOD for each Model Element at each phase of the Project." [Andy Smith]

Q: How do attributes and geometry relate in LOD? Attributes as in information – i.e. are they mixed and matched too? LOD 300 info with LOD 100 geometry for FM [Albert Zulps]

A: As answered in James question above , yes they are mixed and matched. [Donald Henrich]

Q: How much using the model (instead of drawings) to build exists now and will exist in the future? [Daniel Hogan]

A: No one uses models instead of drawings. They use models for certain tasks and the drawings for other tasks. [Donald Henrich]

Q: What is an estimate of the man hours required to build a viable BIM estimating model if you don't already have one? [Bruce Schmiedl]

A: If you have no model then building a 30 million dollar office building project would take 1 to 2 man weeks, depending on expertise. [Donald Henrich]

Q: Who ends up driving the bus in this process? [James Carr] The whole team is driving the bus. [John Ahern]

Q: With D-Profiler from Beck Technologies, how much of the macro BIM development can be reused in a BIM documentation tool like Revit? [Edwin Guerra]

Q: The model is the intellectual property of the architect, of which they are very protective. Using BIM for estimating depends on integration. [James Carr]

Q: The model should have an IFC (Industry Foundation Class) translation capability for maximum value. [Paul Adams]

A: Most systems do support IFC, the Vico software has IFC support. [Donald Henrich]

Q: Where can designers acquire accurate unit pricing information? [Michael MacVittie]

Q: How do you track LEED related materials? [Onkal Guzey]

A: You can use a field in Vico Office that you specify for LEED values, you can then report on them to create a summary. [Donald Henrich]

Q: Is this methodology better suited to any particular project delivery system? [David Trevino]

A: No, it works with all types of contracts. [Donald Henrich]

Q: Are there any cloud solutions that facilitate coordinating and updating the design/ engineering side with the cost estimating side? Perhaps a browser based interface that allows everyone to look at the same model... [Henry Buckingham]

Q: Has a standard been developed for item identification? [Raymond J. Kelly]

Q: By making wall and door information coincident to rooms, is there not a risk of confusing the data e.g. counting twice? Why not tie wall data to assemblies and information such as equipment to spaces? [Michael MacVittie]

A: No risk of counting something twice when the computer does the counting and gives you a visual map to check the process. [Donald Henrich]

Q: E203 attempts to solve some of these issues as well. [Kevin Miller]