

Date:

Participating Members:

Assessment Context:

E-Act Informed by Data
2-Project Planning, Scoping, and Design

E.2.b – Data-Driven Project Design

Element Description Selection of materials and design features based on observed performance and maintenance / operational needs.

Benchmark Level 0	Benchmark Level 1	Benchmark Level 2	Benchmark Level 3	Benchmark Level 4
Asset performance and cost information is not considered in the design process.	Anecdotal (qualitative) information about asset performance and cost information is considered in the design process.	Selected quantitative asset performance information (e.g. material performance) is available to designers but use of this information is not a formally established part of the design process.	There are established, documented design procedures for use of asset performance data. Field performance is verified by experimentation, and proper statistical practices are followed (e.g. minimum sample size, etc.).	There are automated processes for retrieval of relevant performance data from business systems at design inception. Performance data gathered via sensor or similar technology is analyzed and used to optimize material selection and other design elements.
Current: <input type="checkbox"/> Desired: <input type="checkbox"/>	Current: <input type="checkbox"/> Desired: <input type="checkbox"/>	Current: <input type="checkbox"/> Desired: <input type="checkbox"/>	Current: <input type="checkbox"/> Desired: <input type="checkbox"/>	Current: <input type="checkbox"/> Desired: <input type="checkbox"/>
<input type="checkbox"/> Document expert opinion regarding benefits and best uses of design alternatives. Summarize typical costs.	<input type="checkbox"/> Perform statistical evaluation of design outcomes using asset information. Document high and low performing options.	<input type="checkbox"/> Institute routine evaluation of project-level performance outcomes. Incorporate findings into design process / decisions.	<input type="checkbox"/> Implement monitoring tools to capture detailed performance data that can inform future design improvement.	
<input type="checkbox"/> Document agency best practices relating to asset data use in project design. Develop communication materials (e.g. case studies) to share practice.	<input type="checkbox"/> Promote awareness of project design expectations through targeted outreach and communication.	<input type="checkbox"/> Develop and implement a training program and materials for asset data-informed design decision-making and processes.	<input type="checkbox"/> Establish a formal program for evidence-based design and construction practice improvement.	
<input type="checkbox"/> Other:	<input type="checkbox"/> Other:	<input type="checkbox"/> Other:	<input type="checkbox"/> Other:	

Assessment Notes:

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Improvement Notes:

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