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Engineered Resilient System Life Cycle Costing Model

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Abstract: In order to make the best use of the defense spending budget, it is critical that the Department of Defense (DoD) accurately predict the Research, Development, Test and Evaluation (RDT&E), Procurement, and Operation and Support (O&S) costs down to the third level of the Work Breakdown Structure for Major Defense Acquisition Project (MDAP) wheeled or tracked vehicles. This research utilizes historical data, extracted from government databases, to develop cost estimating relationships (CERs) that predict the life cycle cost of wheeled and tracked vehicles based on attributes. This research can also be leveraged for defense acquisition programs across the DoD portfolio. The model will be integrated into a tradespace analysis tool, ERS & CREATE-GV, which was developed by ERDC to predict the cost of each alternative created in the tradespace.

Keywords: Life Cycle Cost, Attributes, Wheeled and Tracked Vehicles, Tradespace