ABC-UTC Data Management Plan

I. Training

At the start of the funding period the PIs, senior personnel, technician and students on the project will convene a dedicated data management meeting. At this time the PIs will set out naming, processing and storage conventions for all data collected at the experimental and observational sites, as well as conduct training in annotating datasets with necessary metadata. All participants will be trained in data management best practices (e.g. Borer et al. 2009). This training will be reiterated at a yearly data management and analysis meeting, to remind participants of the conventions and train any new participants.

II. Types of data

The data created by this project will be in the form of simulation results, performance models, and experimental measurements relating to the Accelerated Bridge Construction. The data will be captured in Excel Spreadsheets and comma delimited raw text fills. Data originally recorded on physical paper datasheets will be transferred into spreadsheets using non-proprietary software (e.g. open office platforms stored as ASCI files, .txt or .csv formats).

III. Data and Metadata Standards

Microsoft Excel will be used for data storage. Excel is the easiest program for keeping track of this kind of data. Also, there are open source equivalents and data can be easily exported to these for sharing. The metadata is mainly in the form of column heading and explanatory text. These will be created by scripts and hand annotations.

IV. Policies for access and sharing and provisions for appropriate protection/privacy

The data will be made public subject to the applicable law and policy; resource constraints; U.S. national, homeland and economic security and those imposed by data quality and the need to protect individual privacy, and confidentiality. No additional resources are needed to run this website. The data will be updated twice a year. There will be no charge for accessing this data. The right to use the data will be retained by the researchers and ABC-UTC before opening it up to wider use, but once the data is used in a published to publish a paper the corresponding data will be released.

V. Policies and provisions for re-use, re-distribution

There will be no permission restriction placed on the data. Other computer architects are the most likely consumers of this data. The intended or foreseeable uses / users of the data would be those seeking to improve the efficiency and performance of supercomputers. And there are no reasons not to share or re-use data.

VI. Plans for archiving and Preservation of access

Plans have been made for archiving data for preservation and access. The data will initially be stored within the UTC institutions. In addition, to ensure longterm curation and preservation,

data resulting from UTC research will also be deposited in the Florida International University's College of Engineering and Computing database system (web.eng.fiu.edu/ABC-UTC). The Principal Investigator for ABC-UTC, Florida International University, Chair and Professor Atorod Azizinamini, has offered to host the ABC-UTC data at no cost to the proposed UTC as long as space is available.