# NSF Independent Cost Review, August 2022 Documents

Folder Organization

Main Folder: [1[9. Independent Cost Estimate documents](https://docushare.icecube.wisc.edu/dsweb/View/Collection-16494)](https://docushare.icecube.wisc.edu/dsweb/View/Collection-16494)

This folder contains the following subfolders:

 [1030s](https://docushare.icecube.wisc.edu/dsweb/View/Collection-16497) Contains the UW 1030’s by year for FY23-FY26 (PY5-PY8)

 [1030\_PY5\_Rev1.xlsx](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90527/1030_PY5_Rev1.xlsx)

 [1030\_PY6\_Rev1.xlsx](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90527/1030_PY6_Rev1.xlsx)

 [1030\_PY7\_Rev1.xlsx](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90527/1030_PY7_Rev1.xlsx)

 [1030\_PY8\_Rev1.xlsx](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90527/1030_PY8_Rev1.xlsx)

 [Cost Workbook](https://docushare.icecube.wisc.edu/dsweb/View/Collection-16496) Contains the following files:

[Final Combined Rebaseline Cost Workbook PY5-PY8 Rev1.xlsx](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90521/Final%20Combined%20Rebaseline%20Cost%20Workbook%20PY5-PY8%20Rev2.xlsx) This is the cost workbook that the 1030s above were derived from. This is under active review.

[Rebaseline Cost Workbook PY5-PY8 Rev4.xlsx](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90699/Rebaseline%20Cost%20Workbook%20PY5-PY8%20Rev4.xlsx) This is the latest cost workbook which has some corrected errors pointed out by the NSF reviewer. It also has updates for PCMS, escalation costs. The 1030 forms based on this cost workbook are embedded in the excel sheet.

[RateTable\_Rebaseline](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90668/RateTable_Rebaseline.xlsx)  This is a rate table that contains values for Fringe and Indirects by University. It also contains generic rates for positions that are not yet filled.

 [Costing Methodologies and Assumptions](https://docushare.icecube.wisc.edu/dsweb/View/Collection-16504) Contains the following files:

 [D\_02\_IC\_Upgrade\_Cost\_Estimating\_Plan.pdf](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90242/IceCube%20Upgrade%20CEPv5_2.pdf)  Cost Estimating Plan for PY5-PY8 planning

 [D\_03\_IC\_Upgrade\_KeyAssumptions.pdf](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90191/IceCubeGen2_KeyAssumptionsv-Upgrade_v1_15.pdf)  Key Assumptions Document for the PY5-PY8 Plan. Contains detailed assumptions on costs, schedule, escalation, contingency calculations, etc.

[NavigatingICUCosts.pdf](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90467/NavigatingICUCosts.pdf) Gives a quick overview of how to navigate the cost workbook and the relation to the Basis of Estimates and vendor quotes.

[D\_04\_IC\_Upgrade\_TravelAnalysis.pdf](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90304/D_04_IC_Upgrade_TravelAnalysis.pdf) This document analyses recent travel data to give guidance to the project team for estimating costs for travel and South Pole deployment.

[IceCube Upgrade Risk\_Management\_Plan\_2019-004.pdf](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90576/IceCube%20Upgrade%20Risk_Management_Plan_2019-004.pdf) Describes Project’s approach to risk management.

 [IceCube Upgrade Risk Evaluation.pdf](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90679/IceCube%20Upgrade%20Risk%20Evaluation.pdf) Describes method and results of quantifying discrete risk impacts on cost and schedule.

[IceCube\_Upgrade\_Risk\_Registry.xlsx](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90677/Risk_Registry_July_16_2022.xlsx) Latest IceCube Risk Register for PY5-PY8.

[IceCube Upgrade ScopeV3\_1.pdf](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90680/IceCube%20Upgrade%20ScopeV3_1.pdf) Describes the project’s up and down scope options.

 [Basis of Estimates](https://docushare.icecube.wisc.edu/dsweb/View/Collection-16495) Contains folders for each WBS L2 area. In the folders are the Basis of Estimate documentation for each WBS element.

[Project Documents](https://docushare.icecube.wisc.edu/dsweb/View/Collection-16536) Contains the following files:

[IceCube Upgrade WBS Dictionary.pdf](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90714/IceCube%20Upgrade%20WBS%20Dictionary.pdf) WBS Dictionary for the Upgrade

[ICNO Draft Divestment Plan](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90715/ICNO%20Draft%20Divestment%20Plan.pdf) Very brief divestment plan for the IceCube Neutrino Laboratory

[NSFRebaselineApr2022\_rev1.x1sx](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90713/NSFRebaselineApr2022_rev1.xlsx) Excel spreadsheet containing recommendations and comments from the April 2022 NSF rebaseline review.

[Project Execution Plan](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90716/IceCube%20Upgrade%20PEP%20Rebaseline_V26.pdf) Latest Upgrade Project Execution Plan.

[ICU Logistics Anlysis of Alternatives](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90719/ICU%20Logistics%20Analysis%20of%20Alternatives.pdf) Describes the Project’s response to the probabilities of logistics availabilities as given to the project by NSF – AIL.

[Schedules](https://docushare.icecube.wisc.edu/dsweb/View/Collection-16537) Folder to contain project schedule PDF’s / Excel.

**Cartoon Rebaseline Schedule** (both [pdf](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90717/Cartoon%20Rebaseline%20Schedule%20PY5-PY8.pdf) and [xlsx](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90718/Cartoon%20Rebaseline%20Schedule%20PY5-PY8.xlsx)) contains an overview of the project schedule, focusing on the critical path items.

**Full Schedule** (xlsx)[Rebaseline Schedule](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90723/Rebaseline%20Schedule%20PY5-PY8_2022-07-26.xlsx) and the matching cost spreadsheets from SmartSheets broken up into two parts: all WBS areas except 1.2 ([Final Rebaseline Cost Workbook PY5-PY8](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90725/Final%20Rebaseline%20Cost%20Workbook%20PY5-PY8.xlsx)) and WBS 1.2 ([Final 1.2 Rebaseline Cost Workbook PY5-PY8](https://docushare.icecube.wisc.edu/dsweb/Get/Document-90724/Final%201.2%20Rebaseline%20Cost%20Workbook%20PY5-PY8.xlsx)).

The documents above (except for the WBS dictionary and Divestment Plan) have all been updated since the April NSF Rebaseline review. Additional project documents that did not need updating can be found in the April 2022 NSF review container here:

<https://docushare.icecube.wisc.edu/dsweb/View/Collection-16473>