fabrication capabilities require regular recapitalization to incorporate industry supported technology.

Future uranium storage capacity has been addressed through the recently completed Highly-Enriched Uranium Materials Facility (HEUMF). Plutonium storage capacities indicate a potential issue in the FY 2014 time frame. Plutonium storage capacities and options are being analyzed to develop a more holistic approach to resolving issues for the foreseeable future and provide better support for continued directed stockpile work activities.

There is also a need to clearly delineate between a baseline, or "potential" capacity and the actual number of units made. For example, Y-12 may have future baseline capacity of 80 canned subassemblies per year but the number actually produced in a given year could be far less depending on stockpile requirements. Thus, the capacities should be clearly understood as different from the number actually made in a given year. Historically, the number of actual units made is a fraction of the infrastructure capacity.

Capacities During NNSA Transitions

For most capabilities, transition from the infrastructure of today to a modernized infrastructure of tomorrow does not introduce rate-limiting concerns, because efficiencies are improving during the transition. Plutonium pit work is a concern because it is today's main rate-limiting capacity. The upgrades to PF-4 will address this capability and provide the required capability-based capacity. The new UPF is planned to be capability-based and the resulting capacity is expected to be lower than Y-12's existing old uranium production facilities. The existing Y-12 infrastructure was designed to support Cold-War stockpiles and thus it has a greater capacity than needed long-term, unless one of the existing facilities is unexpectedly shut down, resulting in a capacity of zero. Tables D–2 and D–3 show the transition of estimated plutonium and HEU capacities from today to 2024.

Table D–2.Transition Annual Plutonium Pit Capacities at Los Alamos National Laboratory (Bounding Estimates)

	Today	2016	2017	2018	2019	2020	2021	2022	2023	2024
Pits requiring most manufacturing process steps	10	10	15	20	20	40	60	80	80	80

Table D–3.Transition Annual HEU Canned Subassembly Capacities at Y-12

	Today	2016	2017	2018	2019	2020	2021	2022	2023	2024
CSAs requiring only reuse/ re-inspection (a) (b)	40	40	40	40	40	0-40	0-40	80	80	80
Refurbished or new CSAs	160	160	160	160	60-120	20-60	0-40	40-80	80	80

(a) Capacity over and above that assumed for refurbished or new CSAs; assumes UPF Program Requirements Document, Rev 4.

(b) A transition from existing facilities to UPF will occur in 2019 through 2021; the transition approach will be closely coupled to stockpile needs during that period.