

FAC 1742 Maneuver/Training Land, Heavy Forces

FY25 SUC: \$3.27 / AC

Source: Inflated from previous FY using ENR labor and material cost indices to measure actual inflation

Original Source: Army Training Area Carrying Capacity model (ATACC) adapted for FSM

Sustainment Unit Cost Calculations for FACs 1741 and 1742

			Acres per Training Event	TD Cost	Total Cost per Acre
Training-Independent costs per acre (same for light and heavy forces)	\$1.42	Per Acre			
Training-dependent costs per Infantry BCT (FAC 1741)**	\$23,298.00	Per Year	118,611	\$ 0.196	\$1.62
Training-dependent costs per Heavy BCT (FAC 1742)**	\$269,337.00	Per Year	306,410	\$ 0.879	\$2.30

Sources:

TC 25-1, Training Land, Appendix A

Army Training Area Carrying Capacity model (ATACC) adapted for
FSM

**annual mileage for maneuver training for all events in a year

Maneuver Training Land Sustainment

Maneuver Training Land Sustainment is modeled as the sum of:

- (1) The cost of land sustainment activities that do not depend on the training load of the installation. (Independent Costs – IC)
- (2) The cost of land sustainment activities that depend on the training load of the installation (Training Load-dependent Costs – TC). These activities seek to restore the condition of the training land back to its original state before the training activities. The variable cost also depends on the type of training land at the installation, which affects its carrying capacity to support maneuver training.

Sustainment Cost (FAC 1741 or 1742) = IC + TC.

The training-dependent and training-independent costs are calculated as shown below.

Independent Costs (IC)

Costs that do not depend on the training load, and only depend on the acreage of maneuver training land. Examples include but are not limited to Erosion Control Management Plans, Studies and necessary equipment. These costs are calculated based on a study of actual maintenance costs between 1998 and 2004.

Total IC per Installation = IC per Acre * Acreage of Maneuver Land.

The cost factor for IC is the same for both light and heavy maneuver land, since the program costs for the land maintenance program remains the same for both light & heavy maneuver units.

Training Load Dependent Cost of Sustainment (TC)

To calculate the cost of restoring land to its pre-training condition, erosion status (ES) is used as the measure of land condition. ES is chosen as the best measure of land condition for military installations because soil erosion is a quantifiable variable that is easily understood by both military trainers and natural resources managers. Although other measures of land condition including vegetation composition exist, soil erosion is a good general indicator.

Military training activities directly and indirectly affect erosion rates and installations often have land management plans with goals to maintain erosion rates at levels that ensure the training lands will continue to support the training mission. The Erosion Rate of 16 different soil types at various military installations was studied by CERL and AEC in 2002, and this algorithm uses an average of these erosion rates to quantify the amount of erosion to be expected for a given training load. Further, the results of an analysis of land maintenance costs to restore land condition at Army installations, for tasks such as

seeding and the construction of sediment traps, are used to model an average cost for a given training load.

To calculate the training-dependent costs, the following formula is used:

TC = Training Load * Land Cost Factor where

Training Load = the number of multiples of a notional Heavy Brigade Combat Team (for FAC 1742) or a notional light Brigade Combat Team (for FAC 1741) supported by an installation.

Land Cost Factor = Land Maintenance cost to support one notional Heavy Brigade Combat Team (for FAC 1742) or one notional light Brigade Combat Team (for FAC 1741).