

Replacement Facilities

A state may decide to replace a damaged highway facility with a new replacement facility. The extent of ER participation varies depending on the circumstances involved. Various scenarios, with examples, are discussed below.

Scenario 1 – A highway facility has been seriously damaged; however, inspection verifies that it is possible to repair and restore the existing facility. Although the facility is repairable, the state decides it wants to replace the existing facility with a new or alternative facility. In this case ER funding can be applied towards a new or alternative replacement facility; however, ER funding is limited to the ER Program share of the estimated cost to repair the existing facility. Regular apportioned federal aid highway funds may be used to fund project costs above the amount eligible for ER funding.

Example – An elevated structure serving as a portion of a non-interstate route in an urban area does not collapse although seriously damaged by an earthquake. It is determined the structure is repairable at an estimated cost of \$50 million. The state does not want to repair the elevated structure but instead wants to replace it with an alternate facility at-grade or depressed. If the alternate facility provides comparable traffic service and will accommodate the known corridor traffic demands of the predisaster facility, then ER funds may participate in the federal share of the replacement facility up to an amount of \$40 million in ER funds (\$50 million estimated cost of repair multiplied by the 80 percent federal share for non-interstate ER repair work). This is commonly referred to as capping the amount of eligible ER funds.

Scenario 2 – A highway facility has been seriously damaged and inspection confirms that it is not repairable. The state decides it wants to replace the existing facility with an in-kind replacement facility (of comparable function and character to the damaged facility) on the existing location. In this case, ER funding may participate in the total cost of the replacement facility.

Example – A bridge on a non-interstate route crossing a river is heavily damaged and collapses during flooding. It is determined the bridge cannot be repaired but must be replaced. The state decides to replace the bridge at the existing site and the replacement structure costs \$5 million to build. Emergency relief funding may participate in 80 percent of the incurred costs which, in this example, amount to \$4 million.

Scenario 3 – A highway facility has been seriously damaged and inspection confirms that it is not repairable. Although it is feasible to build a replacement facility at the location of the existing facility, the state chooses to replace the existing facility with an in-kind replacement on a new location. In this case ER funding for the replacement facility is limited (capped) to the ER Program share of the estimated cost to replace the facility in-kind at its existing location. Regular apportioned federal aid highway funds may be used to fund project costs above the amount eligible for ER funding.

Example – In the same example used in the second scenario previously, instead of replacing the bridge at the existing site, the state chooses to replace the bridge at a new site a half mile downstream, using this as an opportunity to improve the overall alignment of this section of roadway. Because of stream characteristics at the new downstream bridge site, a longer structure is required. Also, the new site requires a mile of additional approach work. The result is that a bridge at the new site costs an additional \$2 million (to a total of \$7 million) above the estimated cost to replace the bridge at the existing site. For this \$7 million project, ER funding may participate in the federal share of costs up to an amount of \$4 million (\$5 million estimated cost of replacement at the existing site multiplied by the 80 percent federal share for non-interstate ER repair work).

Scenario 4 – A highway facility has been seriously damaged and inspection confirms that it is not repairable. Additionally because of the very unique circumstances involved, it is determined that it is neither practical nor feasible to replace the facility in-kind at its existing location. Consequently, an alternative replacement facility is developed through the NEPA process that is on a new location. Provided this alternative is of comparable function and character to the destroyed facility, it is eligible for ER funding. It is noted this scenario rarely arises under the ER Program. In almost all cases it is practical or feasible to replace a damaged facility in-kind on its existing location and the determination that the facility must be built on a new location is intended to be an extremely stringent test.

Example – Located in a valley area, a rural non-interstate highway is blocked by a massive landslide that also dams up a river in the valley. The landslide forms an earthen dam, backing up the river and forming a lake. Two miles of roadway are submerged under a significant depth of water. A decision is made by authorities that the landslide formed dam will remain in place along with the lake it has created. It is determined it is neither practical nor feasible to replace the highway at the existing location. As a result, the highway must be relocated and the appropriate replacement facility, developed through the environmental/public involvement process, becomes a relocated facility, four miles in length, bypassing the submerged section of roadway. The relocated facility costs \$20 million to build and ER funding may participate in 80 percent (\$16 million) of this total cost.