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# Example 3 - Union High School District Building

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**CEF Instructional  
Guide  
(Version 2)  
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*Federal  
Emergency  
Management  
Agency*

**Example 3      Category E – Buildings & Equipment – Union High School Gymnasium**

This example illustrates the use of R. S. Means unit prices for uncompleted work in the preparation of the CEF.

**Project Background**

The project involved estimating the cost to repair an earthquake-damaged gymnasium located in Silver Spring, MD. The applicant is Union High School, a public school system, which owns and maintains the gymnasium. Public school systems are eligible applicants and the gymnasium is an eligible facility.

The gymnasium structure is a one-story, 19,992 SF concrete and steel building constructed in 1958. The building is located at the northwest portion of the main campus. The structural repairs consist of installing steel bracing and ceiling repair.

**Information relating to the calculation of CEF factors**

The gymnasium site is easily accessed and is separated from the other buildings of the Union High School campus by a large perimeter parking lot used during sporting events. The interior work is congested because of the limited space available for work within the locker rooms. Repair work associated with the gymnasium is considered Category E. The degree of difficulty of the repair work is considered moderate. Quantities for this CEF were based on “As-Built” drawings of the gymnasium provided by the applicant, subsequent to a site visit by the project formulation team.

The CEF estimate was completed using R.S. Means unit costs for the uncompleted work. Quantities for this CEF estimate were obtained during the site visit conducted by the project formulation team, and were cross-checked against “As-Built” drawings of the gymnasium provided by the applicant.

The repair work does not involve toxic or any other hazardous materials and there are no environmental issues. The building has no historic considerations. The applicant has indicated that there was no insurance coverage for the structure or its replacement.

The City Cost Indices for Silver Spring, MD have been established by the PAO from R.S. Means as:

<u>Division</u>	<u>City Cost Index</u>
2	0.86
3	0.89
4	0.84
5	0.97
6	0.78
7	0.89
8	0.87
9	0.82
10 - 14	0.96
15	0.90
16	0.93