



Subject: Facilities Enterprise Analytics | Facility Condition Index (Methodology Documentation)

Document Link: <https://facilities.health.mil/Repository/getFile/18645>

References:

- DHA agreed upon FAC & Floor list:
<https://facilities.health.mil/repository/getFile/15649>
- DHA DMLSS-FM Calculated PRVs:
<https://facilities.health.mil/repository/getFile/15430>
- DMR Model Methodology:
<https://facilities.health.mil/Repository/getFile/16598>
- DoD 7000.14-R – Department of Defense Financial Management Resolution Volume 2B: “Budget Formation and Presentation (Chapters 4-19)” – Chapter 6, page 6-86.
http://comptroller.defense.gov/Portals/45/documents/fmr/Volume_02b.pdf
- DoD 7000.14-R – Volume 6B, Chapter 12, Section 1203.
http://comptroller.defense.gov/Portals/45/documents/fmr/Volume_06b.pdf
- OUSD (AT&) Memo: Standardizing Facility Condition Assessments, 10 Sep 2013
- Executive Order (EO) 13327 Federal Real Property Asset Management
- SFFAS 40 Statement Federal Financial Accounting Standards 40 – Definitional Changes Related to Deferred Maintenance & Repairs. http://www.fasab.gov/pdffiles/handbook_sffas_40.pdf
- UFC 3-701-01 DoD Pricing Guide:
<https://facilities.health.mil/Repository/Download/19593>

Details:

FCI Definition and Calculation for individual real property assets:

- FCI is a value captured at a specific point in time of the facility’s condition composed of the deferred maintenance and unforeseen damages not repaired divided by the Plant Replacement Value. “FCI formula numerators makes up the total deferred Real Property Maintenance & Repair that is reported on each Component' s annual Financial Statement in accordance with Financial Management Regulation (FMR) 7000.14-R, Vol. 6B, Chapter 12, Section 1203.”
- Deferred maintenance and repairs (DM&R) is maintenance and repair activity that was not performed when it should have been or was scheduled to be and which is put off or delayed to a future period.
- The FCI for an individual asset is calculated as follows:

$$FCI = \left(1 - \frac{\sum \text{Deferred Maintenance and Repair (DM\&R)}}{\sum \text{Plant Replacement Value (PRV)}} \right) * 100$$

- The Deferred Maintenance and Repair (DM&R), previously called Requirement Total, is defined as the total of the deferred maintenance and repair work amount of all CMMS/CAFM¹

¹ The current MHS enterprise CMMS/CAFM system is DMLSS-FM.



requirement records associated to the facility record where the **“Include in FCI” box is checked**. Modernization work is not included in the DM&R value.

- e. The **PRV²** is calculated by the DHA based on information stored in the CMMS/CAFM, as defined in the reference document linked above.

FCI Calculation for MTF (DMIS) organizations:

1. Note that only building assets are included in the MTF (DMIS) FCI calculations.
2. The FCI for DMIS-level organizations is aggregated based on **prorated PRV** and **prorated requirement amounts** for all CMMS/CAFM facility records associated to a given DMIS ID.
 - a. DMIS IDs are associated to individual room records within the MHS enterprise CMMS/CAFM. The net area of each room is totaled to determine that total net area for each DMIS in a given facility.
 - b. The percentage of space occupied by each MTF (DMIS) in a given facility is calculated based on the **total net area** (total net square feet) of the facility (building), referred to as the **DMIS Ratio**.

$$DMIS\ Ratio = \frac{\sum NSF\ for\ the\ DMIS\ (MTF)}{\sum Total\ Building\ Net\ Square\ Feet\ (NSF)}$$

- c. The prorated PRV and prorated Requirement Total amounts are then calculated:

$$Prorated\ PRV = DMIS\ Ratio \times PRV$$

$$Prorated\ DM\&R\ Total = DMIS\ Ratio \times \sum DM\&R\ for\ the\ Building\ (DM\&R\ Total)$$

- d. These prorated amounts are then summed together for each DMIS ID across the MHS enterprise, to obtain the Total DMIS PRV and Total DMIS DM&R amount.

$$Total\ DMIS\ Plant\ Replacement\ Value\ (PRV) = \sum_1^n Prorated\ DMIS\ PRV$$

$$Total\ DMIS\ DM\&R = \sum_1^n Prorated\ DMIS\ DM\&R\ Total$$

- e. The MTF (DMIS) FCI is then calculated as:

$$MTF\ (DMIS)FCI = \left(1 - \frac{\sum Total\ DMIS\ DM\&R}{\sum Total\ DMIS\ Plant\ Replacement\ Value\ (PRV)} \right) * 100$$

Error Handling:

1. All spaces should have a DMIS ID associated with them. However, in the event that a space has no DMIS ID associated that space is ignored in the MTF (DMIS) FCI calculation.

² PRV is Current Year (Value) on the WCT; reference UFC 3-701-01 “DoD Pricing Guide” for more information on PRV calculation