Leverage Overview

The Federal Emergency Management Agency (FEMA)'s Key Performance Indicator (KPI) 3 for its Cooperating Technical Partners (CTP) Program is defined as the percent of leveraged contributions (from both CTPs and non-CTPs) toward digital flood data. Leverage includes not only items that save FEMA money, but also contributions that add to the quality of FEMA's products, making them more useful. Leverage represents the value of all non-National Flood Insurance Program (NFIP) resources contributed by any university, federal, State, regional, multi-jurisdictional, tribal, or local entity which supports the development, revision, or maintenance of Map Mod-related products. Leverage can also include in-kind services (e.g. topographic data, field surveys, engineering analyses, and GIS efforts). Accurately capturing partner contributions helps FEMA meet its target goals by showing how FEMA's funding is being used and how resources are being maximized by Map Modernization (Map Mod). As CTP membership continues to grow, FEMA will continue to capture and report leverage to demonstrate how dollars have been "stretched" through flood hazard mapping.

Beginning in March 2007, FEMA began using the Mapping Information Platform (MIP) to store leverage information in order to increase the efficiency of the leverage collection and calculation processes. Leverage information is also collected through the CTP Mapping Activity Statements, information from the Regional Management Centers (RMCs), and input from the FEMA Regional Offices. This document is to be a step-by-step guide for MIP users. It describes how to enter information into the MIP Leverage Screens and provides guidelines for those responsible for reporting leverage.

Entering Leverage in the MIP

Leverage data is specific to each data development (production) task and is intended to show any contribution towards the making of Digital Flood Insurance Rate Maps (DFIRMs). The MIP captures leverage information when a task within a flood mapping project is updated by the manager of that task with an actual start date, actual cost to date, percent complete, and the as of date. Once that information is entered for each task in the project, the manager is able to enter leverage information for each applicable task.

There are leverage screens in different locations within the MIP. However, the official KPI 3 numbers are only calculated using the **MIP Studies Workflow – Manage Data Development task**. In the past, some MIP users have entered leverage information in the MIP Sequencing Tool, and in so doing, assumed the information would be officially counted as leverage information for their Region. However, the MIP Sequencing Tool is strictly a planning tool and was designed to capture only high-level leverage data for each county, not detailed leverage data pertaining to specific mapping partners and specific project tasks. Therefore, it is important to understand that the Sequencing Tool is <u>not</u> used to calculate the official FEMA KPI 3 numbers. For the purposes of this document, the focus will be on the MIP Studies Workflow – Manage Data Development leverage screens.

MIP Studies Workflow:

After logging into the MIP, go to the Work Bench and choose Work Items list. Choose the correct project from your Work Items list and claim it to access it. The Task Status screen below (Figure 1) displays.

Figure 1: Task Status Screen (all tasks)
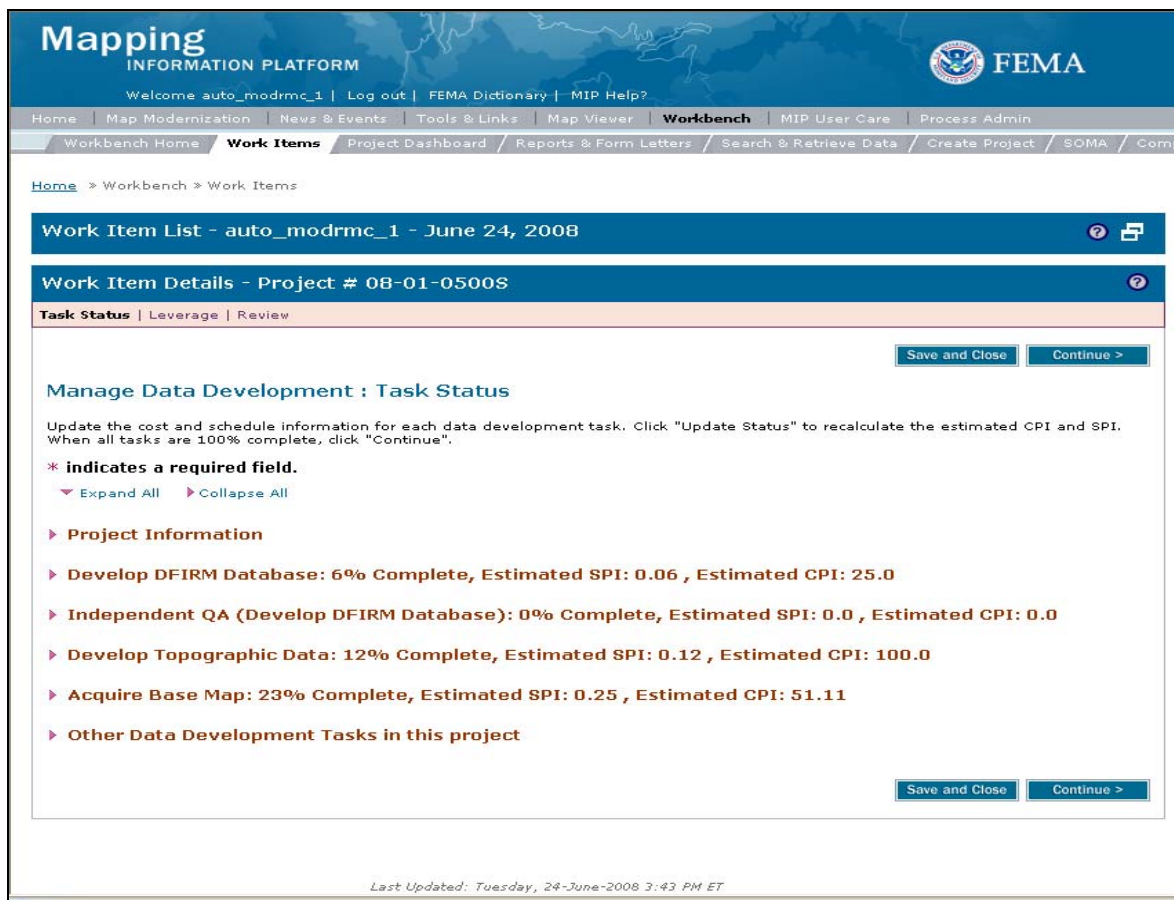
Accessing the Leverage Screen:

To access the Leverage screen, the following four fields on the Task Status screen (Figure 2) must have a value in *each* task listed:

1. Actual Start Date
2. Actual Cost to Date
3. As Of date
4. Percent Complete

Figure 2: Task Status Screen Shot (one task opened)

These four fields must be filled out for *each* Data Development task in order to move on to the Leverage screen, even if a particular task within multiple tasks does not have leverage information associated with it. If there are multiple production tasks in Manage Data Development, the user must enter information in all four of the above mentioned fields for all the tasks associated under the Task Status screen before the user can continue on to the Leverage screen. In the example above (Figure 1), this means that the user must enter a value in each of the four fields in each task listed (Develop DFIRM Database, Independent QA, Develop Topographic Data, and Acquire Base Map).

IMPORTANT: Do not continue to the Leverage screen until each task has actually started (be sure to fill in an accurate Start Date on the Task Status screen before moving on to the Leverage screen).

Once there is data in each of the four fields in each task on the Task Status screen, click Continue to move to the Leverage screen (Figure 3). The Leverage screen is the second tab on the Manage Data Development task (see the red circle in Figure 3).

Figure 3: Leverage Screen Shot
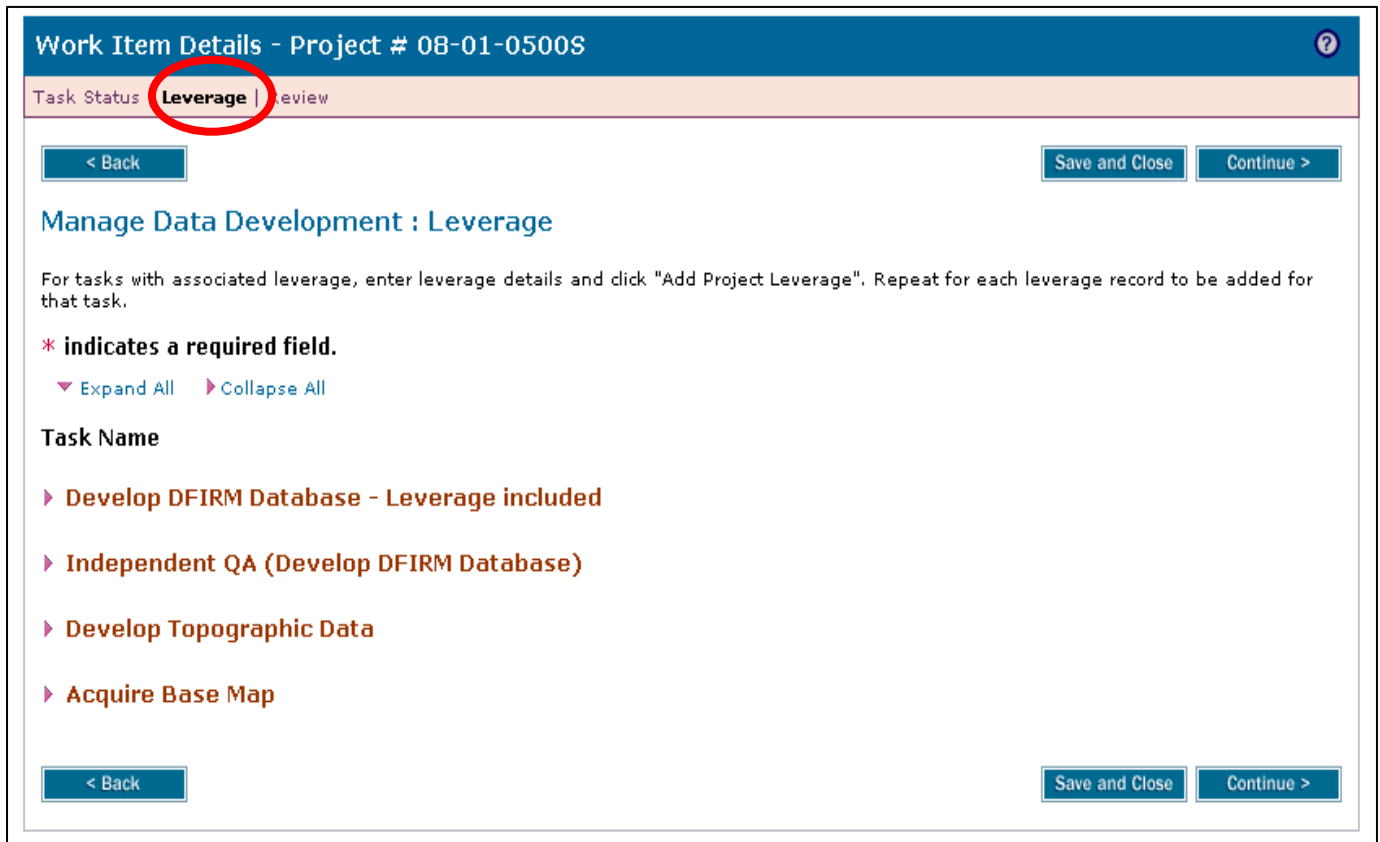
Entering Data on the Leverage Screen:

The user is required to fill out four fields for each task for which there is leverage information to be entered. The four fields are marked on the screen shot below (Figure 4) with a red asterisk. If no leverage information is relevant for the task – the fields do not need to be filled out.

Figure 4: Leverage Task Name Screen Shot

- **Quantity**: how many units were completed (e.g., 5)

- **Type (Blue Book Units or Dollars)**:

  o FEMA has assigned over 40 different Blue Book values for various mapping

activities. For example, Independent QA/QC for Detailed Riverine Hydrologic Analysis has a current value of $1,781 per linear mile. There is a dropdown list to choose the type of units for each mapping task (e.g., square miles or panels or dollars). However, dollar values are only acceptable when there are no unit costs.

- o The FEMA Blue Book (November 2006) contains current values for each mapping task that can receive leverage credit. Download the Blue Book for free from the FEMA website (http://www.fema.gov/plan/prevent/fhm/ctp_info.shtm). Currently there is not a unit value for LiDAR in the Blue Book, because there is not enough specific information or historical data to pull out unit values. Therefore, actual costs are used instead of units. One method of calculating the LiDAR value is to count it as a combination of Topographic Data at $59 per square foot, and 1 meter Orthophotos at $25 per square mile. This shows LiDAR as a Topographic Data/Orthophoto mix.

- o Please be sure to enter all the Project Element information for Detailed Riverine, Limited Detail Riverine, Detailed Coastal, Detailed Alluvial and Approximate Analysis. This is required information in order to calculate the Blue Book value. For example if a dollar value is entered for the Floodplain Mapping task, please use the Comments Field to enter how many linear miles and if this was Approximate Analysis or Detailed Riverine, etc.

- **Contributed By**: provides a dropdown list of mapping partners to choose from

  - o The mapping partners in the "Contributed By" dropdown list include state or local agencies (CTPs and non-CTPs), federal agencies, universities, regional planning organizations, but not usually contractors.

  - o If the mapping partner that should be credited with the leverage (in kind services, dollars, or data) is not available in the dropdown list, please ask the RMC to contact MIP Help (miphelp@mapmodteam.com) and request that the partner be added to the list of options. If this partner has recently signed a CTP Partnership Agreement and is a new CTP, please also make note of that in the Comments field.

- **Federal Fiscal Year**: the year that FEMA awarded the mapping funds so that the mapping tasks could be started

Optional fifth field:
- **Comments**: provides the user an opportunity to enter comments regarding the leverage
  - o Helpful comments could include information about actual cost data for tasks not listed in the Blue Book.

Click the Add Task Leverage button after entering the data in the leverage fields. If you Save and Close or Continue before clicking the Add Task Leverage button, your data will not be saved.

In some cases, a task may have multiple sources of leverage contributions. The Leverage screen are designed so that more than one source can be credited with the leverage if the mapping task is split among two contributors; however two separate entities should not be credited for the same leverage. If there is more than one leverage source, continue to enter leverage information for all sources of leverage and click Add Task Leverage for each one. The Modify and Delete buttons are available to edit the information already added.

There are other situations in which certain leverage contributions have not yet been captured in the MIP either because the contribution was not known when the project began, or because it was a task which had not been assigned a Blue Book value in the past (e.g., LiDAR data). In these situations, work with your RMC, who will in turn work with MIP Help to enter the necessary information into the MIP.

Click Back to return to the Task Status screen or click Continue to move to the Review screen to complete the task.

KPI 3 Reporting:

The KPI 3 results include both CTP, as well as non-CTP leverage. A user can enter leverage information at any point after all available tasks have started (even if the tasks are not complete). However, users are encouraged to enter leverage information in a timely fashion so that the leverage they contribute during that fiscal year best matches the FEMA funding that was allocated specifically to that partner for that same fiscal year (assuming the work has begun on schedule).