

Master Work Plan (MWP) in PE

Typically, a transportation agency will keep a list of planned projects and update the projects regularly for when the project will be performed, where it will be performed, the planned treatment, and estimated project cost. This list is termed a master work plan (MWP) in Pavement. The MWP can serve as the part of the inputs to network analysis. Furthermore, the final list of sections proposed for treatment based upon network analysis results and, as necessary, user intervention can be saved for the next year's work plan.

During the network analysis, the projects in the existing master work plan are considered "already programmed" and therefore will be excluded from the optimization routine, but still be included in the final work program. In other words, including a master work plan will force the system to apply the defined treatments in the specified years to the defined segments. In analysis, these projects are considered "off the top" and processed before any other project selection is done.

Pavement is able to perform this type of analysis procedure and produce the required outputs.

When an MWP is plugged into an optimization analysis, the system will first find the MWP projects that intersect in full or in part with the management sections included based on the analysis scope. Then, these MWP projects together with the original management sections are finest partitioned to create the updated analysis sections. The resulting sections are then placed into the USER_OPTIMIZATION_ENGINE table and proceeded with the defined analysis procedure. However, the analysis procedure will only consider the portions of MWP project that intersect with scoped management sections. After the analysis is finished, when MWP projects are copied into the final scenario work plan, the full MWP project is used even if portion of it is outside the analysis scope boundaries.

Out of the box, the table that stores the **Master Work Plan** can be navigated to by following the steps below:

1. Select **Analysis** from the top banner menu
2. Click **Network Analysis**
3. Click **Master Work Plan**

In the Master Work Plan window, a user can select a Master Work Plan Type from the drop-down list in the "Select WP Type" field at the top of this window, and review/enter the data for the work plan. The data is then used in optimization analysis and reports. When you right-click the table, a shortcut menu is displayed. This menu contains the common commands along with the following special commands:

- **Recalculate Cost:** This command utilizes the treatment cost formula configured in the Calculated Expressions window. This formula uses the input parameters for treatment costs found in the Master Work Plan window. The result of this formula is then displayed in the Project Cost column.
- **Copy Analysis Results:** This command displays a dialog box from which you select the scenario analysis and then the line items you want to copy to the Work Plan Data window. Click [here](#) for more information on using this command.
- **Copy from Master WP:** This command displays a dialog box from which you select another work plan and then the line items you want to copy to the Work Plan Data window.
- **Copy from Network Master:** This command displays a dialog box from which you select the records you want to copy to the Work Plan Data window.
- **Update Target Table:** This command will populate other columns based on **Segment ID** column, using data from **Roadway Segment** window.

Note: Once an item in a work plan is used to create a construction history record, this command is no longer available for that line item.

The list of Master Work Plan Type drop-down at the top of the window can be maintained at Work Plan Type window which can be navigated to by following the steps below:

1. Select **Setup** from the top banner menu
2. Click **Network Analysis Setup**
3. Click **Work Plan**
4. Click **Work Plan Type**

The MWP Project Status drop-down field in the table can be maintained at the MWP Project Status window which can be navigated to by following the steps below:

1. Select **Setup** from the top banner menu
2. Click **Network Analysis Setup**
3. Click **Work Plan**
4. Click **MWP Project Status**