

Work Plan for Structures

Work Plans

All transportation agencies keep a list of planned projects, which is updated regularly to include when a project will be performed, where it will be performed, the intended treatments, and estimated project cost. This list is termed a work plan. It constitutes the final list of projects and treatments that are proposed for various structures in your network based upon the results of optimization analysis and, as necessary, user intervention. Structures Analyst allows you to analyze the recommended list of projects from one or more optimization analysis runs and compile a work program.

The system allows you to develop multiple work plans of various types.

The list of the work plan types is maintained in the **Work Plan Type** window which can be navigated to by following the steps below:

1. Select the **Structure Analyst** module
2. Select **Setup** from the banner menu at the top of the page
3. Select **Work Plans**

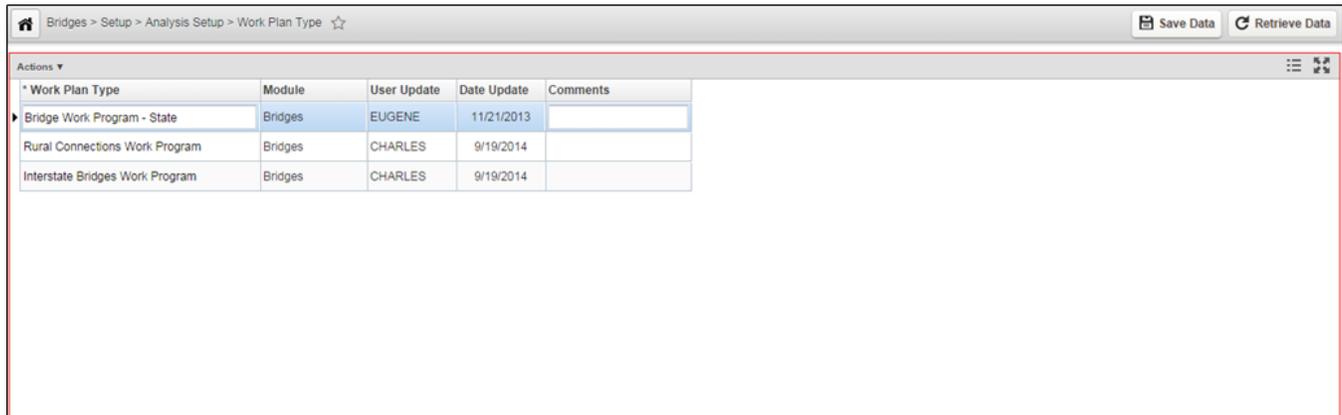
The work plans are maintained in the **Master Work Plan** window which can be navigated to by following the steps below:

1. Select the **Structure Analyst** module
2. Select **Analysis** from the banner menu at the top of the page
3. Select **Master Work Plan** in the drop-down menu

Work plans may also be used as an input to optimization analysis when you want to analyze the impact of the projects in a work plan on the structures in your network as well as when you want to include a specified set of projects in an optimization analysis. For example, if certain projects have already been scheduled, you may want to include these in an optimization analysis so that these projects are always selected and then other projects are added to them as constraints dictate.

Work Plans

Before creating work plans, you need to first create the different types of work plans. **Types** are containers into which the line items of a plan are placed. The set of different work plan types is created and maintained in the **Work Plan Type** window. Below is an example of this window.



Work Plan Type	Module	User Update	Date Update	Comments
Bridge Work Program - State	Bridges	EUGENE	11/21/2013	
Rural Connections Work Program	Bridges	CHARLES	9/19/2014	
Interstate Bridges Work Program	Bridges	CHARLES	9/19/2014	

To create a work plan type, navigate to the Work Plan Types window by following the steps:

1. Select the **Structure Analyst** module
2. Select **Setup** from the banner menu at the top of the page
3. Select **Work Plans**
4. Right-click to open the functionality menu and then click **Insert**
The system adds a new record to the window
5. In the **Work Plan Type** column of the new record, highlight the default name and then type the desired name for the work plan type
Note: This is what will appear in other windows and drop-down lists, so you should make it as descriptive as possible.
6. Click **Save** to save the new work plan type

Master Work Plan

The Master Work Plan window contains the line items for a particular work plan. Below is an example of this window.

The screenshot shows the 'Master Work Plan' window. At the top, there is a breadcrumb 'Bridges > Analysis > Master Work Plan' and buttons for 'Save Data' and 'Retrieve Data'. Below this is a 'Select WP Type' dropdown menu set to 'Bridge Work Program - State'. The main area is divided into two panes. The left pane is a table with columns: 'WP', 'Actions', '* 8 - Bridge Serial Number', 'Plan Year', 'MWP Project Status', 'Total Estimated Cost', 'User Update', and 'Date'. The right pane is titled 'Treatments' and has columns: 'Element', 'Treatment ID', and 'Treatment Cost'. It shows two rows: 'Deck' with 'Deck Maintenance - COT:' and '\$150,000.00', and 'Superstructure' with 'Substructure Maintenance' and '\$350,000.00'.

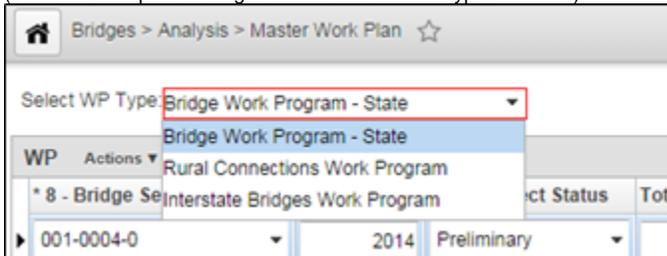
WP	Actions	* 8 - Bridge Serial Number	Plan Year	MWP Project Status	Total Estimated Cost	User Update	Date
001-0004-0		001-0004-0	2014	Preliminary	\$500,000.00	EUGENE	11/2
001-0005-0		001-0005-0	2014	Preliminary	\$25,000.00	EUGENE	11/2
191-0011-0		191-0011-0	2014	Awarded	\$20,000.00	IKOENIG	3/2
135-5187-0		135-5187-0	2011	Scenario Recomm	\$44,226.00		
135-5162-0		135-5162-0	2010	Scenario Recomm	\$44,009.10		
311-5045-0		311-5045-0	2010	Scenario Recomm	\$4,519.75		
135-5162-0		135-5162-0	2009	Scenario Recomm	\$29,339.40		

Element	Treatment ID	Treatment Cost
Deck	Deck Maintenance - COT:	\$150,000.00
Superstructure	Substructure Maintenance	\$350,000.00

Displaying the Line Items for a Master Work Plan

To display the line items in a particular work plan, navigate to the **Master Work Plan** window by following the steps below:

1. Select the **Structure Analyst** module
2. Select **Analysis** from the banner menu at the top of the page
3. Select **Master Work Plan** in the drop-down menu
4. Click the down arrow in the **Select WP Type** field at the top of the window to display the list of work plans (These are the plans configured in the Work Plan Types window.)

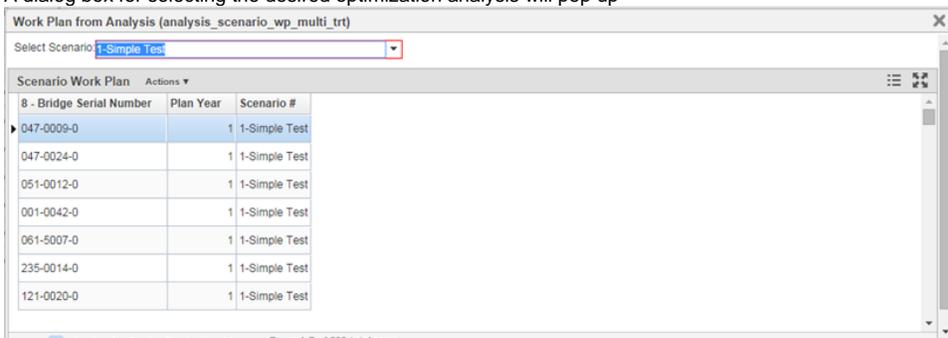


5. Click the desired work plan in the list
The window updates to display the line items for the selected work plan

Adding Projects from an Optimization Analysis into a Work Plan

An optimization analysis results in a list of recommended projects that meet the objective and constraints of the analysis. If desired, you may copy this set of projects into an already-existing work plan by following the steps below:

1. Select the **Structure Analyst** module
2. Select **Analysis** from the banner menu at the top of the page
3. Select **Master Work Plan** in the drop-down menu
4. In the **Select WP Type** field at the top of the window, click the down arrow to open the menu and click the work plan into which you will copy the projects
Once the work plan is selected, any projects that are already in the work plan will be listed
5. Right-click in the left pane and then click **Copy Analysis Results**
A dialog box for selecting the desired optimization analysis will pop up



6. In the **Select Scenario** field at the top of the dialog box, click the down arrow to open the menu and click the optimization analysis out of which you will copy line items.
Once the optimization analysis is selected, the system displays the line items from the analysis
7. Select the line items you wish to copy
Use **SHIFT+click** to select multiple, adjacent line items or **CTRL+click** to select multiple, non-adjacent line items
8. Once the records are selected, right-click and then click **Copy Selected Items**
The system copies the selected line items to the specified work plan

9. Repeat for any additional line items that you would like to copy to the work plan
10. When all desired line items are copied, click **X**
11. Click **Save** to save the changes