SPM User Acceptance Test Script

# Purpose

To test each new upgrade to the Statewide Planning Map and ensure that base functionality is not compromised.

# Process

You will be sent a copy of the HTML for the SPM, which you can save and run off of your desktop. Once the code passes UAT, the application will be updated on our internal server (<http://crossroads/org/tpp/StatewideMapping/>). After testing again in the internal version, the application will be updated on the external server (<http://www.txdot.gov/apps/statewide_mapping/StatewidePlanningMap.html>).

# Section 1: General Application Test

This test section must be completed each time upgrades are made in order to ensure that all functions work properly prior to launching. Once

* Open the application
  + Expected Results:
    - Application opens without errors. Basemap shows in map pane and is zoomed to the extent of the state (more or less – dependent upon your screen resolution).
    - All tabs and table of contents load properly.
    - The zoom control buttons appear in the upper left corner of the map pane.
    - A scale bar, zoom level description, and latitude & longitude appear in the lower left corner.
* Pan and zoom around the map pane. Zoom in to the fullest extent (zoom level 15 – note: the zoom level is displayed in the lower left corner of the display)
  + Expected Results:
    - Map is responsive to panning and zooming
    - Basemap displays properly at each zoom level
* Click to open each of the **Base Maps** located near the top of the table of contents pane.
  + Expected Results:
    - Each basemap loads properly
    - Zoom and pan around each basemap
* Click to open the **Search** tab located at the top of the table of contents pane.
  + Expected Results:
    - Search options appear (City, Control Section, County, District, On System Highway, Search box)
  + Select the City radio button and enter a city name into the search box. Repeat for each of the search options.
    - Expected Results:
      * You see type-ahead results as you type in the search box
      * The map pane zooms to the selected feature
* Click the **Measure** tab. Select a unit of measure. Single click on the map, then double click at another location to measure the distance. Toggle between the units of measure. Click Clear.
  + Expected Results:
    - Each unit of measure is selectable
    - You are able to draw a line measuring a distance.
    - The unit of measure changes as you select each one.
    - The clear button clears the red measure line.
* Click the **Query** tab. Enter a query and click Run Query. Click the highlighted layer.
  + Expected Results:
    - The map will zoom to the selected route.
    - A pop-up window for Roadway Inventory will pop up after the highlighted route is selected. The pop up will contain attributes for the selected route.
* Click the **Sketch Tool**  tab. Choose from the dropdown options. Click in the map pane to draw a route. Click Calculate Cost. Click Clear.
  + Expected Results:
    - The route you have drawn will show in the map pane in red.
    - The Project Length and Estimated Construction Cost details will appear below the Calculate Cost button.
    - The red line will disappear after you click the Clear button.
* Click the **Legend** tab. Go back to the Maps tab and select an overlay, then return to the Legend tab. Repeat for several overlays randomly.
  + Expected Results:
    - The Legend is updated for each overlay.
    - The Legend shows the title or description of the layer and the symbology below it.
* Click the **About** tab.
  + Expected Results:
    - A disclaimer appears with several paragraphs of text
* Select 5 overlays randomly (not just the first 5). Click an asset for each of the selected overlays.
  + Expected Results:
    - Some overlays have labels on the map.
    - A pop-up window appears.
    - The pop-up window contains data for the fields displayed.
    - The data displayed in the pop-up window is not cryptic coded values.

# Section 2: Enhancements Test

This section covers new enhancements made to the application, which must be fully tested prior to launching.

* **Jump to Google/Bing button**
  + Pan and zoom to an area on the Statewide Planning Map
  + Mouse over the “Jump To” button in the top right corner
    - A dropdown list will open containing google maps and bing maps
    - Select either to open a new web browser window for the respective webpage
  + Confirm that the area on google and/or bing maps is the same area and zoom extent from the Statewide Planning Map
* **Legend Descriptions for Railroad Layer**
  + Click on the Railroad overlay to turn it on
  + Go to the Legend tab
    - The Legend shows the text descriptions of each of the four railroads, rather than a code
  + Click on a railroad line in the map to open the pop-up window
    - The popup window shows the text descriptions for Railroad Name, Railroad Abbreviation, Status, and Type
    - The popup window title displays “Railroads:”
* **Spelling Error in Area Office Layer** 
  + Click on the Area Office overlay to turn it on
    - Layer draws and is semi-transparent
    - Click on the Area Offices in the Abilene District to bring up the popup window for the Snyder Area Office. Confirm the spelling of Snyder is correct.
* **Minute Order Link in Highway Designations Popup Window**
  + Click on the Highway Designations overlay to turn it on
    - Click on a line segment to bring up the popup window
      * Popup window opens. Minute Order number is hyperlink
    - Click on Minute Order number hyperlink
      * Web browser opens to minute order page
* **Legend is Empty When No Overlays Are Selected (Clear Overlays)**
  + On the Maps tab, ensure that no overlays are selected (Clear Overlays is highlighted in red)
  + Click the Legend tab
    - Map Legend reads: “Select an overlay to see its legend.”
* **MPO Layer Updated**
  + Click to turn on the MPO layer
  + Zoom to Midland-Odessa area
  + Compare to same geographic area in the current (published) version of the SPM on txdot.gov
    - The shape of the MPO has grown
  + Click on the MPO polygon
    - A popup shows the MPO Name as “Permian Basin” rather than Midland-Odessa Transportation Organization, as is shown in the current version on txdot.gov
* **Highlight Selected Features In Search Tab**
  + Click the Search tab
  + Click a radio button for any search layer (e.g. City, District)
  + Type a value into the text box
    - After 3 or 4 characters, a list of possible matches shows up
  + Click on one of the values
    - The map zooms to that feature and it is highlighted with a thick yellow line
  + Click the Clear button
    - Highlighted features disappear
  + Click another radio button
  + Start typing a value into the text box
    - After 3 or 4 characters, a list of possible matches shows up
  + Click on one of the values
    - The map zooms to that feature and it is highlighted with a thick yellow line
  + Click another one of the values in the list (if there are more than one)
    - The map zooms to that feature and it is highlighted with a thick yellow line
    - The first feature (if still visible in the your current extent) is no longer highlighted
  + Click in the text box to start typing another value
    - The highlighted feature disappears
  + Start typing a value into the text box
    - After 3 or 4 characters, a list of possible matches shows up
  + Click on one of the values
    - The map zooms to that feature and it is highlighted with a thick yellow line
  + Select another of the radio buttons
    - The highlighted feature is still visible (did not disappear)
  + Click on the Map tab
    - The highlighted feature is still visible (did not disappear)
  + Turn on one of the Overlays
    - The highlighted feature is still visible (did not disappear)
  + Click on the Search tab
    - The previous search is still showing (radio button is still on the previous search layer and if any results were previously showing in the results box, they are still there) and the highlighted feature is still visible
  + Click the Clear button
    - The highlighted feature disappears