

## PanunTools - ArcGIS Pro License Requirements

| Toolset        | Tool                            | License Level Required  |
|----------------|---------------------------------|---|
| Daily Workflow | Calculate Containment           | <b>Basic</b> <ul style="list-style-type: none"> <li>• <b>Contained vs Uncontained</b></li> </ul> <b>Advanced</b> <ul style="list-style-type: none"> <li>• <b>Inspect Alignment</b> <ul style="list-style-type: none"> <li>○ <i>arcpy.PolygonToLine_management()</i></li> <li>○ <i>arcpy.Erase_analysis()</i></li> </ul> </li> <li>• <b>Contained vs Exterior Length</b> <ul style="list-style-type: none"> <li>○ <i>arcpy.PolygonToLine_management()</i></li> <li>○ <i>arcpy.Erase_analysis()</i></li> </ul> </li> </ul>  |
|                | Calculate Ownership             | <b>Basic</b>  |
|                | Create Fire Perimeter Export    | <b>Basic</b>  |
|                | Create Fire Progression         | <b>Basic</b>  |
|                | Dissolve Explode Perimeter Line | <b>Basic</b>  |
|                | GISS Workflow Assistant         | <b>Spatial Analyst</b> <ul style="list-style-type: none"> <li>• <b>Insert ElevFeet</b> <ul style="list-style-type: none"> <li>○ <i>arcpy.sa.ExtractValuesToPoints()</i></li> </ul> </li> </ul> <b>Advanced</b> <ul style="list-style-type: none"> <li>• <b>Insert LandOwner into Event Points/Lines</b> <ul style="list-style-type: none"> <li>○ <i>arcpy.Identity_analysis()</i></li> </ul> </li> </ul>  |
|                | PDF Georeference Check          | <b>Basic</b>  |
|                | PDF Multi Export                | <b>Basic</b>  |
|                | Update Perimeter IR             | <b>Basic</b> <ul style="list-style-type: none"> <li>• <b>Isolated Heat</b></li> <li>• <b>Intense Heat</b></li> <li>• <b>Scattered Heat</b></li> </ul> <b>Advanced</b> <ul style="list-style-type: none"> <li>• <b>Inspect Growth/Reduction</b> <ul style="list-style-type: none"> <li>○ <i>arcpy.Erase_analysis()</i></li> <li>○ <i>arcpy.PolygonToLine_management()</i></li> </ul> </li> <li>• <b>Check Alignment of Contained Features</b> <ul style="list-style-type: none"> <li>○ <i>arcpy.Erase_analysis()</i></li> </ul> </li> <li>• <b>Heat Perimeter</b> <ul style="list-style-type: none"> <li>○ <i>arcpy.PolygonToLine_management()</i></li> <li>○ <i>arcpy.Erase_analysis()</i></li> </ul> </li> </ul> |

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|----------------------|-------------------------------------|--|
| <b>Data Download</b> | Base Data Acquisition               | <p><b>Basic</b></p> <ul style="list-style-type: none"> <li>• <b>USGS Topo Vector</b></li> <li>• <b>SMA</b></li> </ul> <p><b>Standard</b></p> <ul style="list-style-type: none"> <li>• <b>NAIP Imagery</b> <ul style="list-style-type: none"> <li>○ <i>arcpy.CreateMosaicDataset_management()</i></li> <li>○ <i>arcpy.AddRastersToMosaicDataset_management()</i></li> <li>○ <i>arcpy.DefineMosaicDatasetNoData_management()</i></li> <li>○ <i>arcpy.BuildFootprints_management()</i></li> </ul> </li> <li>• <b>DEM 10m &amp; 30m</b> <ul style="list-style-type: none"> <li>○ <i>arcpy.CreateMosaicDataset_management()</i></li> <li>○ <i>arcpy.AddRastersToMosaicDataset_management()</i></li> <li>○ <i>arcpy.BuildOverviews_management()</i></li> </ul> </li> </ul> <p><b>Advanced</b></p> <ul style="list-style-type: none"> <li>• <b>USGS Topo Raster 100k &amp; 250k</b> <ul style="list-style-type: none"> <li>○ <i>arcpy.FeatureVerticesToPoints_management()</i> <ul style="list-style-type: none"> <li>▪ <i>Requires Advanced License</i></li> </ul> </li> <li>○ <i>arcpy.AddRastersToMosaicDataset_management()</i> <ul style="list-style-type: none"> <li>▪ <i>Requires Standard License</i></li> </ul> </li> <li>○ <i>arcpy.CreateMosaicDataset_management()</i> <ul style="list-style-type: none"> <li>▪ <i>Requires Standard License</i></li> </ul> </li> </ul> </li> </ul> <p><b>Standard &amp; Spatial Analyst</b></p> <ul style="list-style-type: none"> <li>• <b>USFS Topo Raster 24</b> <ul style="list-style-type: none"> <li>○ <i>arcpy.AddRastersToMosaicDataset_management()</i> <ul style="list-style-type: none"> <li>▪ <i>Requires Standard License</i></li> </ul> </li> <li>○ <i>arcpy.CreateMosaicDataset_management()</i> <ul style="list-style-type: none"> <li>▪ <i>Requires Standard License</i></li> </ul> </li> <li>○ <i>arcpy.sa.Combine()</i> <ul style="list-style-type: none"> <li>▪ <i>Requires Spatial Analyst</i></li> </ul> </li> </ul> </li> <li>• <b>Raster Hillshade 10m &amp; 30m</b> <ul style="list-style-type: none"> <li>○ <i>arcpy.sa.Hillshade()</i> <ul style="list-style-type: none"> <li>▪ <i>Requires Spatial Analyst</i></li> </ul> </li> <li>○ <i>arcpy.BuildPyramids_management()</i> <ul style="list-style-type: none"> <li>▪ <i>Requires Standard License</i></li> </ul> </li> </ul> </li> </ul> <p><b>Spatial Analyst</b></p> <ul style="list-style-type: none"> <li>• <b>Vector Hillshade 10m &amp; 30m</b> <ul style="list-style-type: none"> <li>○ <i>arcpy.sa.RemapRange()</i></li> <li>○ <i>arcpy.sa.Reclassify()</i></li> </ul> </li> </ul> |
|                      | Feature Layer Download              | <b>Basic</b>   |
|                      | Feature Service Attachment Download | <b>Basic</b>   |
|                      | Feature Service Backup              | <b>Basic</b>   |

|                       |                                    |              |
|-----------------------|------------------------------------|--------------|
| <b>Incident Setup</b> | Create Event Point Numbering Guide | <b>Basic</b> |
|                       | Create Operations Grid             | <b>Basic</b> |
|                       | Incident Setup AGOL                | <b>Basic</b> |
|                       | Incident Setup ArcGIS Pro          | <b>Basic</b> |
|                       | Invite Remove Users AGOL           | <b>Basic</b> |
| <b>Miscellaneous</b>  | Bookmarks to Index Feature Class   | <b>Basic</b> |
|                       | Create Content Summary AGOL        | <b>Basic</b> |
|                       | Create Group Member List AGOL      | <b>Basic</b> |
|                       | Summarize Folder Files             | <b>Basic</b> |
|                       | Topo Raster 24K Symbolize          | <b>Basic</b> |