

Distance Tool

The Distance tool calculates the distance or drive time between a point and another point, line, or polygon.

1) Run the workflow (Ctrl+R).

2) Select a tool to view its output in the Results window.



Output Distance



The Output Distance option calculates the straight line distance between 2 spatial objects. A new DistanceMiles column is created based on miles being selected as the Units.

Add Cardinal Direction and Direction in Degrees



Enabling the Output Cardinal Direction and Output Direction in Degrees options creates 2 new columns for the Cardinal Direction and Direction in Degrees based on the distance traveled from the source spatial object to the destination spatial object.

☒ These examples require spatial data and a spatial license. Enable this tool container to run these examples.

These examples will display errors if spatial data is not installed and a spatial license has not been activated.

Output Drivetime & Distance



The Output Drivetime & Distance to Destination Centroid option is used to calculate the total drive time or drive distance between 2 spatial objects. This can be optimized in 2 ways:
Time: The output is optimized to find the shortest drivetime and drive distance based on road speeds.



Distance: The output is optimized to ignore road speeds and find the most direct route between 2 spatial objects. Drive time is not returned when distance is optimized because road speeds are not considered.

More Info

The Source spatial object must be a point. The Destination spatial object can be a point, line, or polygon. The measured spatial objects must be in the same record to calculate the distance between the objects. Negative distances indicate that a point falls within a polygon.