

Traverse Tool

The simple traverse measurement tool allows you to create, edit and save a geographic shape based on bearing and distance measurements. Course degrees can be entered in decimal degrees or degree minute second formats. Course angles can be quadrants or north azimuth angles. Course distances can be in a variety of units. The traverse can be rotated around the start point. Traverse areas and closures will always be calculated. Once created the traverse can be saved a GeoJSON shape or saved in a structure compatible with ArcMap CoGo or ParcelFabric. Saved traverse files can be loaded and used at a later time.

Traverse ⌵ ✕

Set starting point using the mouse or keypunching in coordinates

Option for degree format
Option for angle format

Set Starting Point X: Y:

☐ Decimal Degrees ☒ Degrees Minute Seconds

☒ Quadrant Bearing ☐ Azimuth Bearing

Course: Add Draw Insert Duplicate Delete Close

Course	Quad	Deg	Min	Sec	Dist	

Change color of courses

Add a closing course

Delete a course

Insert a duplicate course

Insert a blank course

Add single or multiple course with mouse (double click to end)

Add a course (keypunch)

Set Rotation Angle: 0 Units: Feet Acres

Set traverse rotation
around the start point

Set units for courses and area calculations

Zoom Load Save GeoJSON Clear Report

Zoom to the traverse

Save and load traverse in a ArcMap traverse export format

Export the traverse as standard GeoJSON shape.

Clear the traverse

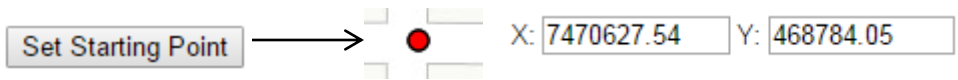
Create a traverse report

Total Distance: 59855.00 Feet | Area: 10129.94 Acres
Closure Error distance: 44417.13 bearing: S43-44-40W precision: 1:1.3

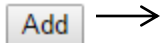

Help!

Traverse Basic Steps

1. Enter the start point with mouse

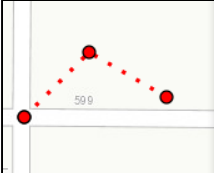


2. Add your first course

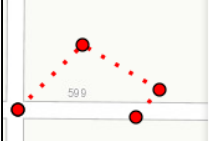
Course	Quad	Deg	Min	Sec	Dist
1	ne	45	0	0	100
2					

3. Add your second course
(enter in line 2)

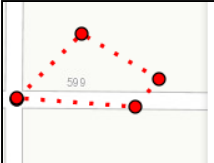
Course	Quad	Deg	Min	Sec	Dist
1	ne	45	0	0	100
2	se	60	22	0	100
3					

4. Add your third course
(enter in line 3)

Course	Quad	Deg	Min	Sec	Dist
1	ne	45	0	0	100
2	se	60	22	0	100
3	sw	40	22	2	40.22

5. Add your fourth course
(enter in line 4)

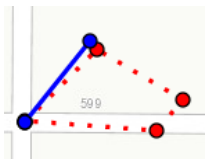
Course	Quad	Deg	Min	Sec	Dist
1	ne	45	0	0	100
2	se	60	22	0	100
3	sw	40	22	2	40.22
4	nw	85	44	22	132.2

6. Check your closure and area
at the bottom of tab



Total Distance: 372.42 Feet | Area: 0.16 Acres
Closure Error distance: 0.51 bearing: S29-43-14E

7. Change the rotation and press
the mouse on an blue angle
point and move it or type an
angle in than press done



Rotation Angle: 6.04



Done


8. View and save a traverse
report



```

TraverseReport_10052016_225008.txt - Notepad
File Edit Format View Help
Traverse Report
Total Distance: 372.42 Feet
Traverse Area: 0.16 Acres
Approximate Starting Point: X = 7470627.54 Y = 468784.05
Approximate Ending Point: X = 7470627.30 Y = 468784.50
WKID: 2913
Number of Courses:4
Closure Error Information:
Distance: 0.5105 Feet
Bearing: S29-43-14E
Course Direction Type: Quadrant
Course Information:
1: 45-0-0-ne,100
2: 60-22-0-se,100
3: 40-22-2-sw,40.22
4: 85-44-22-nw,132.2
    
```

9. Edit a course. Select a course with
the mouse and change any value and
press the enter or + key

Course	Quad	Deg	Min	Sec	Dist
1	ne	45	0	0	100
2	se	60	22	0	100
3	sw	40	22	2	80.22
4	nw	85	44	22	132.2

10. Save the traverse to use later


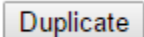
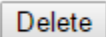



traverse_10052....txt ^

11. Change the traverse color



Traverse Notes

Editing Courses: In addition to editing a single course you can also duplicate a course, delete a single course, or insert a course before the selected course.   

Close a Traverse: You can add a last closing course  to a traverse which will automatically close the traverse using the closure bearing and distance. This tool does not have any other closure methods.

Moving a traverse: You can move the traverse by simply selecting a new start point.

Drawing Courses: You can quickly measure inverses of lines and add courses on the map with the mouse. Double click to end or press (done).

Blank Course: Blank courses (rows) are ignored when calculating closure, running reports, or saving to a file.

Units: All courses in a traverse MUST have the same angle, bearing, and unit formats.

The Keypad: This application supports a standard 10key keypad. The + key works like the enter key.

GeoJSON: You can save multiple courses to multiple GeoJSON shapes that can be easily displayed in most web applications as sketches.

Curves: This tool does not support curves. Enter curves as straight lines using the long cord bearing and distance.

Rotation: You can ONLY rotate a traverse around the start point.

What this tool is and is not: This tool is a simple traverse tool. This tool is NOT a property management system or a CoGo package.

Who developed this tool: This tool was developed in collaboration by the City of Yakima, Washington and Polk County, Oregon.