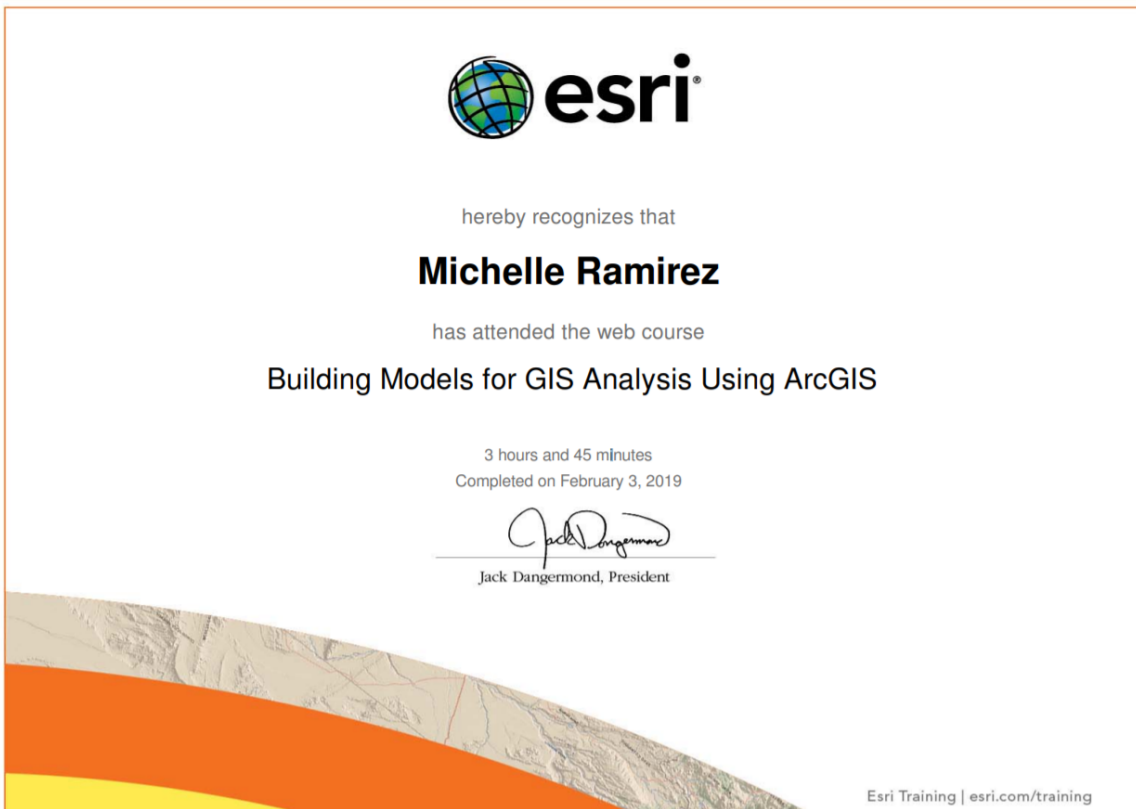


Michelle Ramirez

February 11, 2019

Tutorial 3

1.)





hereby recognizes that

Michelle Ramirez

has attended the web course

Working with Coordinate Systems in ArcGIS

2 hours and 45 minutes

Completed on February 11, 2019

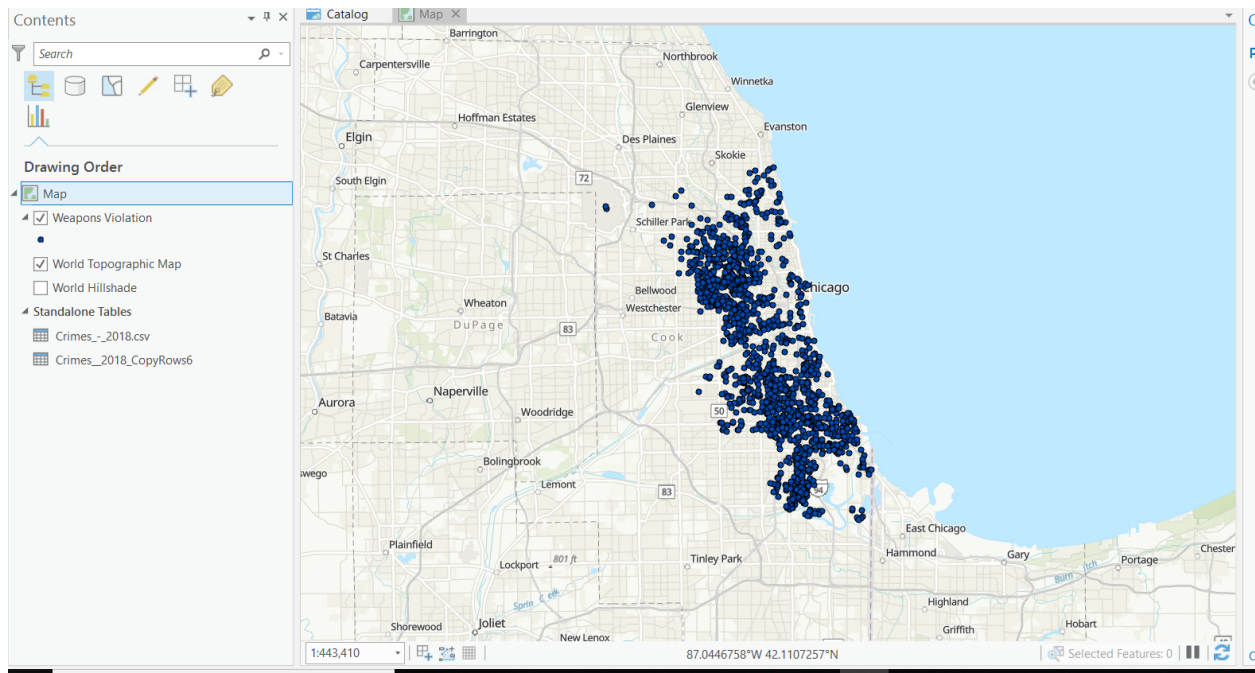
A handwritten signature in black ink, appearing to read "Jack Dangermond".

Jack Dangermond, President

- 2.) Creating a buffer with the radius measure in degrees is incorrect because it distorts the outcome. Degrees are not units of measurement thereof there are no standards to determine measurements between two points. If degrees of measurement were to be used in a buffer the outcomes
- 3.) A PCS must be used when doing analysis that is related when it comes to distance is because this projection is the most accurate coordinate system. It does not take into account the earth's surface and uses a flat two-dimensional surface created a more accurate analysis.
- 4.) A geodesic buffer takes into account the earth's shape (ellipsoid). The measurement of between two points will take into account the curves of the surface. When using a geodesic buffer will preserve the shape and does not change no matter the input coordinate. Unlike the default planar which will default depending on the coordinate system. If there is a projection coordinate system it will be Euclidean buffer.
- 5.) I would use projection tool if I wanted to change the coordinate system in the dataset but if I just wanted to change the metadata I would use the define projection to apply the PCS when the dataset only has the GCS.

6.)

a.

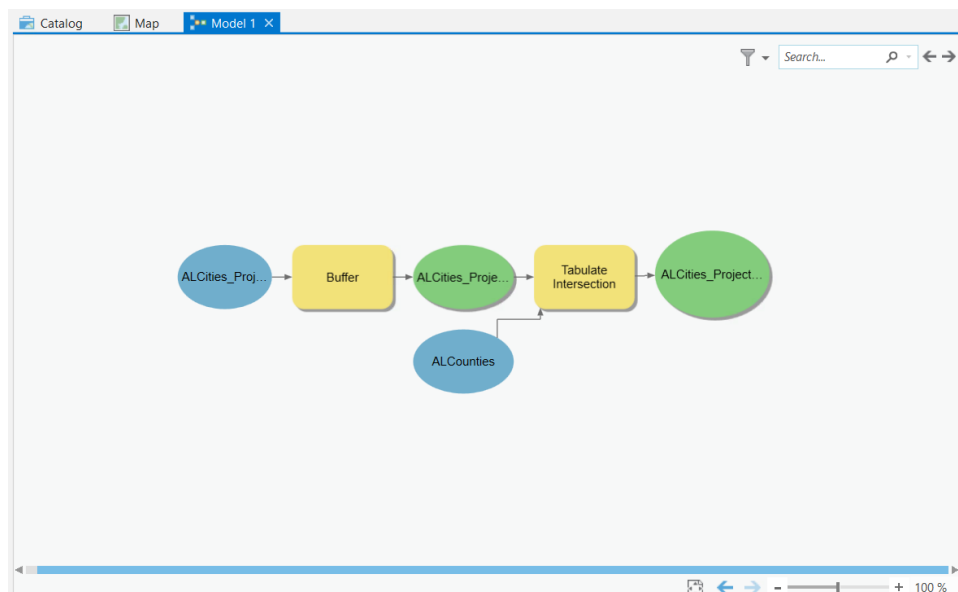


b. For the projection of the map I utilized the WGS 1984 UTM Zone 16 N projection and for the coordinate system I utilized the GCS WGS 1984.

c. Upload

7.)

a.



b.

Population Table					
Field: Add Delete Calculate Selection: Zoom To Switch Clear Delete Copy					
OBJECTID	NAME	POP2000	AREA	PERCENTAGE	
1	Birmingham	610997	0.315798	100	
2	Columbus	66606	0.142816	45.75796	
3	Huntsville	316637	0.312685	97.619547	
4	Mobile	245177	0.259429	84.686159	
5	Montgomery	214300	0.311815	100	
Click to add new row.					

0 of 5 selected

Filters: 100 %

c. Upload