Future Land Use Analysis

City Council Suitability Study

Access To Existing Infrastructure

Criteria Description

The criteria surface that I created to contribute to the City Council Future Land Use Suitability Study takes into account the distance from existing Infrastructure facilities which includes Roads here. I utilized Highways data downloaded from the OpenStreetMap Esri Living Atlas as the basis to render this criteria.

Methodology

In order to render the proximity to existing Infrastructure criterion I rated suitability from 1 - 9 with 1 representing the least suitable and 9 representing the most suitable (see table 1) based on the distance from roads, generated a Euclidean Distance surface using the Roads layer as input and then reclassified the Euclidean Distance Surface into the Criteria Ratings.

Suitability Definition	Suitability Rating
Between 50 and 250 m	9
Between 250 and 500 m	8
Between 0.5 and 1 km	7
Between 1 and 2 km	6
Between 2 and 3 km	5
Between 3 and 5 km	4
Between 5 and 7 km	3
Between 7 and 9 km	2
Within 50 m and	1
a distance greater than 9 km	
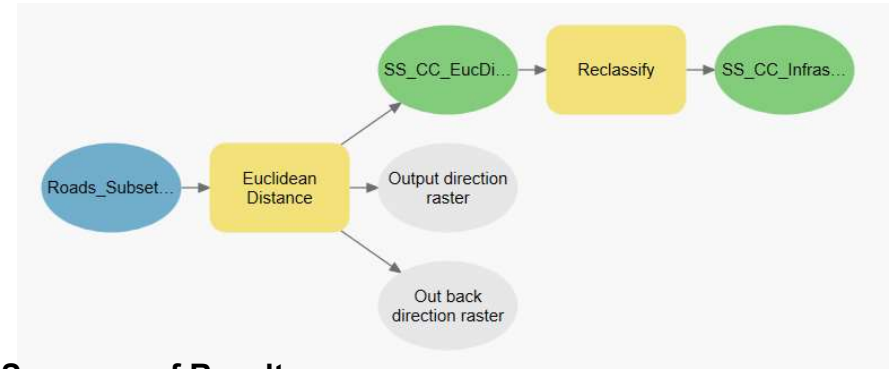
Summary of Results

The results of the analysis reveal that 25% of the study area is highly suitable (even more than 50% of area is suitable) for future land use development in relation to this particular City Council Criteria.

Source: OpenStreetMap North America Highways, Esri Living Atlas; MShah: Euclidean Distance Surface, Suitability Surface/2022

Percent Area for Each Suitability Rating

13%
25%
2%
3%
3%
2%
8%
24%
20%

Access to Infrastructure
Low to High Suitability

- 1 Least Suitable
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9 Most Suitable

0   10   20   40 Kilometers