

# INDUSTRIAL DEVELOPMENT

Industrial Development	-----Criteria and Rating-----									---Relative Weights---			Comments	
	Lowest Value				Neutral				Highest Value	Workshop Score	Assigned Weight	Percent Weight		
Infrastructure -- Group 1	1	2	3	4	5	6	7	8	9	Operation	1 to 5	1 to 5		
Interstate highway			> 5 miles		2-4 miles		1 - 2 mi	0.5 - 1 mi.	< 0.5 mi.	Group 1 Overlay	4.5	5	23.8	Assume cost advantages for projects closer to US and NC highways. Distances based in part on analysis of distance to nearest primary road using point locations of businesses in the Sandhills.
Other primary roads			> 1.6 miles		1.2 - 1.6 mi		0.8 - 1.2 mi	0.4 - 0.8 mi.	< 0.4 mi.	Group 1 Overlay	4.5	4	19.0	Assume cost advantages for projects closer to US and NC highways. Distances based in part on analysis of distance to nearest primary road using point locations of businesses in the Sandhills.
Active rail				> 5280	2640-5280 ft.		1000-2640 ft.		<1000 ft	Group 1 Overlay	3.8	2	9.5	Assume cost advantages for projects closer to rail lines. Enough industries benefit from rail transportation to make this a factor in suitability.
Public sewer service		> 4000 ft			3000-4000 ft		2000-3000 ft	1000-2000 ft	<1000 ft	Group 1 Overlay	4.3	5	23.8	Assume cost advantages for projects within or near public wastewater service areas
Public water service		> 4000 ft			3000-4000 ft		2000-3000 ft	1000-2000 ft	<1000 ft	Group 1 Overlay	4.5	5	23.8	Assume cost advantages for projects within or near public water service areas
<b>Total Group 1</b>												21	100.0	
	Lowest Value				Neutral				Highest Value		Workshop Score	Assigned Weight	Percent Weight	
Land factors -- Group 3	1	2	3	4	5	6	7	8	9		1 to 5	1 to 5		
Slope (percent)	>25%			15-25%			10-15%	4-10%	<4%	Map Algebra A (minimum of group)	3.6			Assume cost advantages for gentle slopes and constraints on steep slopes
Soils (hydric)			hydric A				hydric B		not hydric	Map Algebra A	4.0			Wet (hydric) soils are less suitable for development
Floodzone 100-year	100-yr		future 100-yr				500-year		outside zone	Map Algebra A	4.0			Floodzones are less suitable for development or would be a cost disadvantage
Wetlands			inside						outside	Map Algebra A	4.3			Wetlands are problematic for commercial development
Lands managed for conservation & open space										Out Mask		0		Out of bounds for development
Water supply watershed critical protection area										Out Mask		0		Rules restrict development
Lakes and ponds										Out Mask		0		Out of bounds for development
Military bases										Out Mask		0		Long-term public ownership and restricted use
<b>Total Group 3</b>												0		
<b>Group 1 Overlay Weight</b>													60.0	
<b>Group 2 Overlay Weight</b>													0.0	
<b>Group 3 Map Algebra Weight</b>													40.0	
													100.0	

Note: Assigned weight: 1 to 5 with 5 the most important for conservation of natural areas; relative weights may be changed when evaluating model results to achieve the best balance between the multiple factors.

Note: Cell size is 98.4 feet or 30 meters on a side or about 9,687 square feet or one-fifth acre. This is consistent with the lowest resolution of the available --land cover data (30-meter resolution); most of the data layers used in the model are mapped at a scale of 1:24,000 or better which implies precision to plus or minus 40 feet or less.

Sources: William B. Farris, CGIA and Division of Coastal Management, Land Suitability Analysis, 2003; Frederick Steiner, *The Living Landscape*; Carteret County Land Suitability Analysis; Steiner et al, A Decade with LESA; NRCS Farmland Protection Program Attachment 3; CTNC project sessions, 2005. TRLC project sessions, 2006. Sustainable Sandhills focus group, 2007.