SUITABLE SITE SELECTION FOR ECONOMIC DEVELOPMENT





THE QUESTION...

Which parcels are most suitable for use as industrial lands?

Lowndes County has approx. 48,000 parcels

IDEALLY...

Paved Arterial Streets

No Wetlands

Adequate Soils

Nearby Railroad

Utilities Present

THE TECHNICAL TARGET...

Parcel 0102-23 **Transportation Score: 80** Wetlands Score: 72 Soils Score: 54 **Rail Score: 90 Utilities Score: 87 Total Score: 393**

Individual category scores and a cumulative score for all 48,000+ parcels

WHAT'S IT REALLY WORTH?

Chris Strom

0 10 20 30	40	50	60 7	0	80 9	0 100
Streets						
dirt local roads Example: collectors	jor xr	Paved minor collector	Paved major collector		Paved arterial	interstate
Wetlands						
area	ofland area		<50% 8 % of lar area	a>25 d	<25% & <10% >10% of &>0% land area of land	0% of land area
 dirt, local roads = 1 Weighting applied to 	Soils		Overall soil score for each p weight factors assigned to a	arcel is calculated using t creage ranges and then a	ar ca he break points indicated r weraged to produce a sing	nultiplied by le, final score
westlembe (totadsarez) an Solits (type):ollector = 17	d Brn, WA, Water	Ada, ChA, Cn, Da, Gr, Jo, Le, Lu, MO, Mn, Oa, Ou, Pe		LaC, LwC, NkC, Se, SuC2, VaB		FsB, DoB, TfA, TfB, TuB
• dirt major collector = 34		Railroad				
• paved minor collector = 51 Example: for a 20 acre parcel, th soils. For another 20 acre parcel, the acre sonsiethe exact opposite • paved arterials = 82	here are 5 , there ma e).	acres of lo be 15 act	w Wallu e so res of low v	ils and 15 mile value soils	of high vo ànd only !	វាបែឌ៉ ^e 5 of
A total score is not enough. Unle coloret atesoremoti parcel score rating.	ess the <u>tot</u> e, both pa	al acceage rcels would	of each so I both have	the same	is üsed to overall so	o <200' away Dil

CONSTRUCTION BEGINS...



Using ArcGIS Model Builder software, analysis models were built for every category of analysis.

A CLOSE-UP OF THE TRANSPORTATION MODEL:



- 1 start with roads layer
- 2 select ONLY dirt roads and build buffer around them
- 3 select parcels that intersect those buffers
- 4 calculate score

5 – repeat for every road type

OVER AND OVER AND OVER AGAIN...



AFTER TRANSPORTATION ANALYSIS:

Transportation classes and scores

Total percentage of all parcels within classifications:

- dirt, local roads = 1
- paved local roads = 17
- dirt minor collector = 17
- dirt major collector = 34
- paved minor collector = 51
- paved major collector = 65
- paved arterials = 82
- interstates = 100
- not within .10 miles of any road



6%

< 1%

11 %

7%

17 %

2 %

1.5 %

combined 56 %

AFTER WETLANDS ANALYSIS:



Land area percentage breaks and scores Total percentage of all parcels within each classification:

 > 90% of land area within wetlands = 1 	< 1%
• < 90% and >75% of land area within wetlands = 17	<1%
<75 and >50% of land area within wetlands = 37	2%
• <50 and >25% of land area within wetlands = 65	4%
• <25 and >10% of land area within wetlands = 85	4%
• <10 and >0% of land area within wetlands = 90	4%
 0% of land area within wetlands = 100 	85% (

85% (a large portion of these are within urban areas)

AFTER SOILS ANALYSIS:

Parcel Soil Scores



AFTER UTILITY AND RAIL ACCESS ANALYSIS:

Access to Utilities

Proximity to either utility	
and assigned score:	Percentage of parcels within each classification:
• > 1/2 mile = 50	24%
• < 1/2 mile and > 1000' = 75	7%
• < 1000' and > 200' mile = 88	9%
• < 200' = 100	60%

Access to rail

Proximity to Railroad and assigned score:	Percentage of parcels within each classification:	
• > 1 mile = 50	34%	
• < 1 mile and > ¾ mile = 60	11%	
• <3/4 mile and >1/2 mile = 70	14%	
• <1/2 mile and >1/4 mile = 80	18%	
• <1/4 mile = 90	23%	

TO SUM IT UP ...

Highest scores equal the best overall characteristics for development

~ 352 = minimum desirable score based on visual inspection



DECISIONS, DECISIONS...

- Delivered booklets of TOP 40, 20, and 10 scoring parcels
- Delivered an interactive web application with all data layers and scoring details for each parcel.

Parcel Id: **29399** Overall Score: 414 Owner: James Littleton Spivey, III Total Acres: 133



Parcel Id: **29399** Nearest Railroad: Adjacent Transportation Access: Paved Arterial Nearest Utility: Adjacent Zoning Class: R-A Land Area in Wetlands: 15%





Wetland Areas indicated in blue shading

Water Line

Sewer Line

Parcel Id: **29399** Soil Scoring (1-100): 57



Using GIS:

- Documented, reproducible decisions
- Flexibility in the way we value parcel characteristics
- Analysis tool that can be easily shared with other GIS users

Brad Lofton

FINAL FOUR EVALUATION



Tract Four

Acreage:

Utilities: (onsite, adjacent, or distance)

Owner's Price:

Per Acre Price:

Per Usable Acre Price: (less wetland or easements)

Committee Recommendation:

Notes: (special conditions by owner or possible issues with site)





MILLER TRACT



WESTSIDE TRACT



SUCCESSFUL CONCLUSION

Both parks are in the process of being Engineered and Developed.



