

Identifying Alternative Sites for a New Cohousing Community in the Portland Area



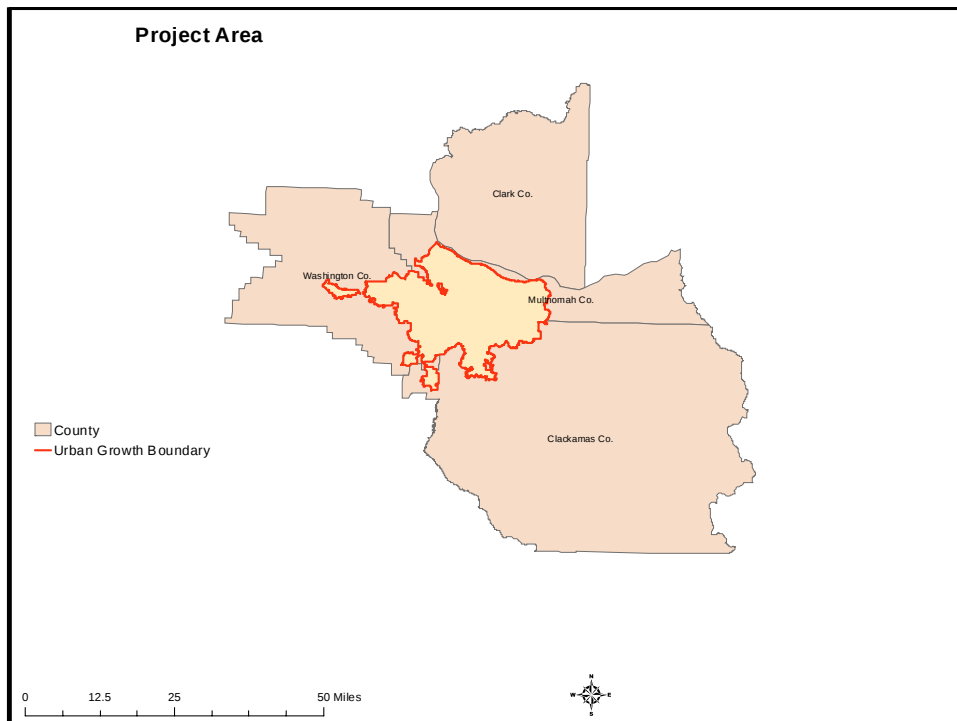
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GEOG 592
Portland State University
March 15, 2005

What is Cohousing?

- An intentional community with private homes and common facilities.
- Costs associated with housing, food, transportation, utilities, and childcare are shared.
- Created in order to work towards social, economic, and environmental sustainability.

Project Problem

- The proposed cohousing community would consist of five detached, single family homes, one common house with a library, kitchen, and child care facilities, a shared work studio, a community garden, and shared open space.
- Identify three possible sites for a new cohousing community within the Portland area that fulfill several criteria.



Criteria

- Within the UGB
- At least one acre of land (43,560 sq. ft./ or 13,277 meters)
- Zoned SFR_R5 (1 unit/5,000 sq.feet or 1,523 meters)
- Less than ¼ mile (1320 ft. or .4 km) from public transportation (bus stop)
- Less than ¼ mile (1320 ft. or .4 km) from a park

Criteria

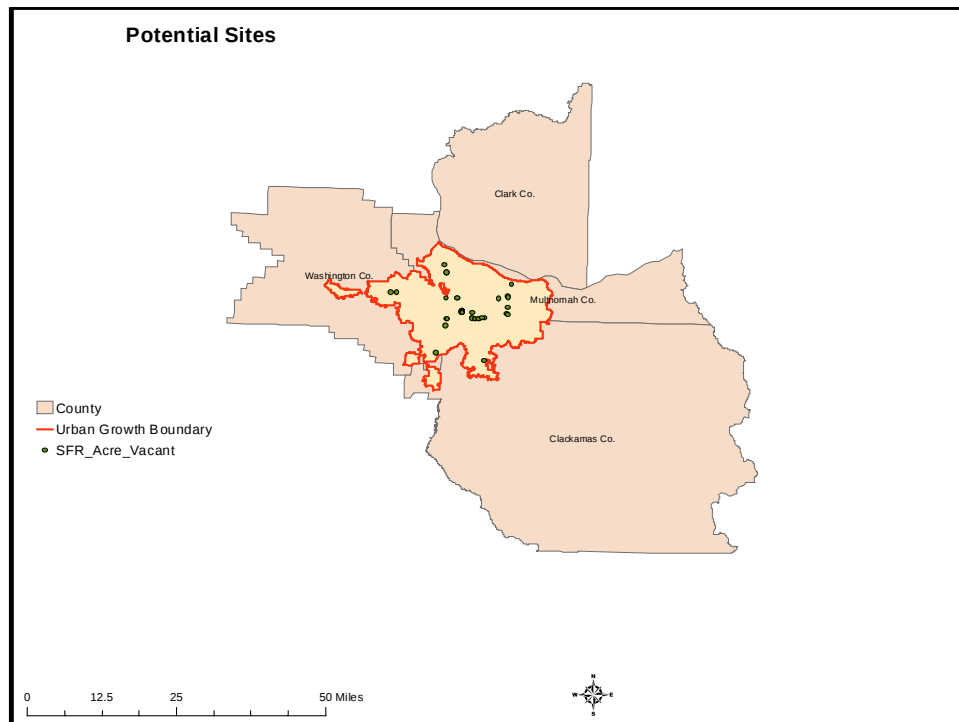
- Less than 1 mile (5280 ft. or 1.61 km) from a public elementary school
- Less than 1 mile (5280 ft. or 1.61 km) from a public middle school
- Less than 1 mile (5280 ft. or 1.61 km) from a full service grocery store
- Less than 1 mile (5280 ft. or 1.61 km) from a library

Data

- Coalition for a Livable Future, 2005
 - Full service grocery store, Equity Atlas
- RLIS, 2004
 - Develop, Vacant
 - Boundary, UGB
 - Land, Zoning and Parks
 - Taxlot
 - Slope_25
 - Transit, Bus Stops
 - Places, Schools and Library

Process

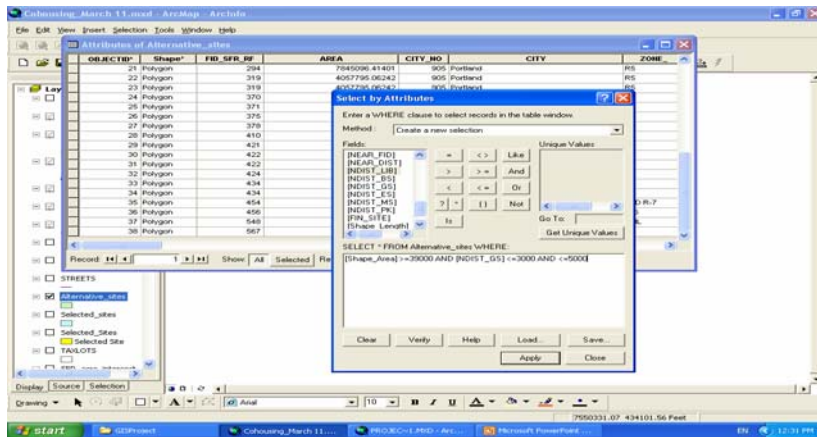
- Clipped all data to the UGB fill layer using Clip Tool
- Created new layers:
 - From Zoning data “selected by attribute” **SFR_R5**; added as a layer
 - From Vacant data “selected by attribute” **vacant lots** between the sizes of $\geq 40,000$ and $\leq 46,000$ square feet (43,560 sq. feet = 1 acre); added as a layer
 - From School data “selected by attribute” **public elementary** and **middle schools**; added as two separate layers.
- Joined the SFR_R5 layer and the 1 acre vacant lots layer to with Intersect Tool.
- Exported the **SFR_vacant_acres** shapefile into a geodatabase so that the shape area would be calculated.
- There were 18 sites at least 1 acre in size



Process

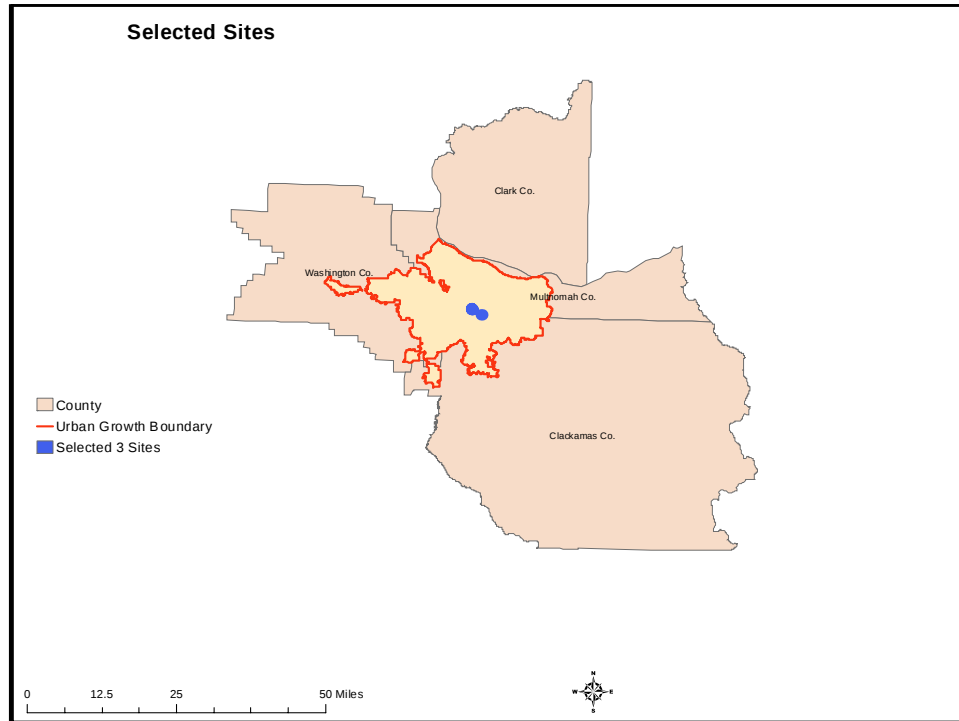
- Used Near Tool to calculate the distance from the 18 SFR_vacant_acre lots to parks, schools, library, bus stops and grocery stores and saved each Near calculation in the SFR_vacant_area layer
- To use the Near Tool:
 - Converted the SFR_acre_intersect and park polygon layers to points Using the Feature to Point Tool.
- Used a query in the SFR_vacant_area attribute table to select sites based on criteria.

Query



Process

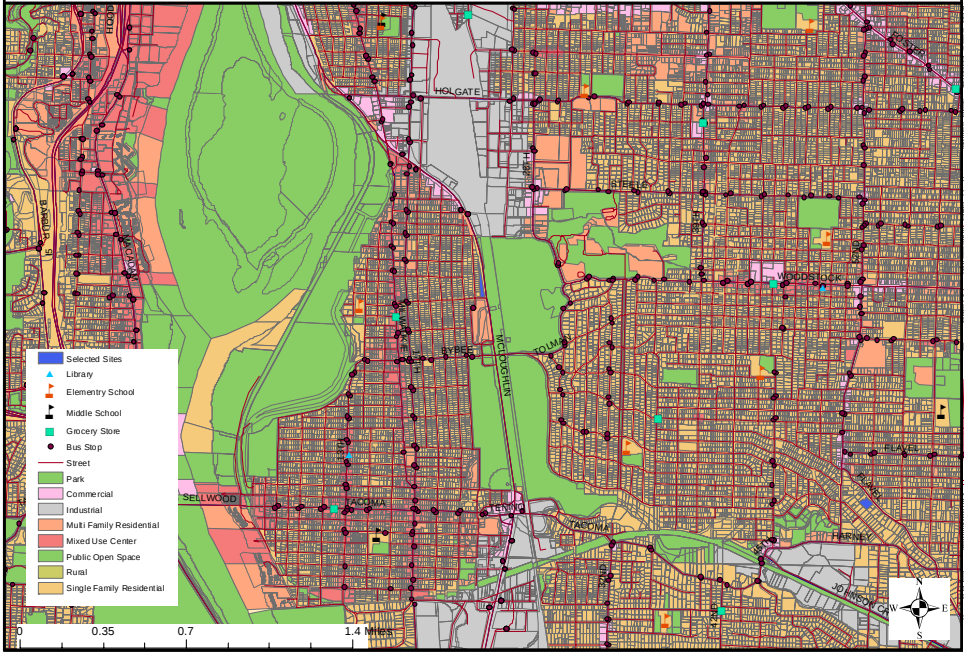
- Three potential sites were identified.
- Taxlot data was used to identify ownership and land value.



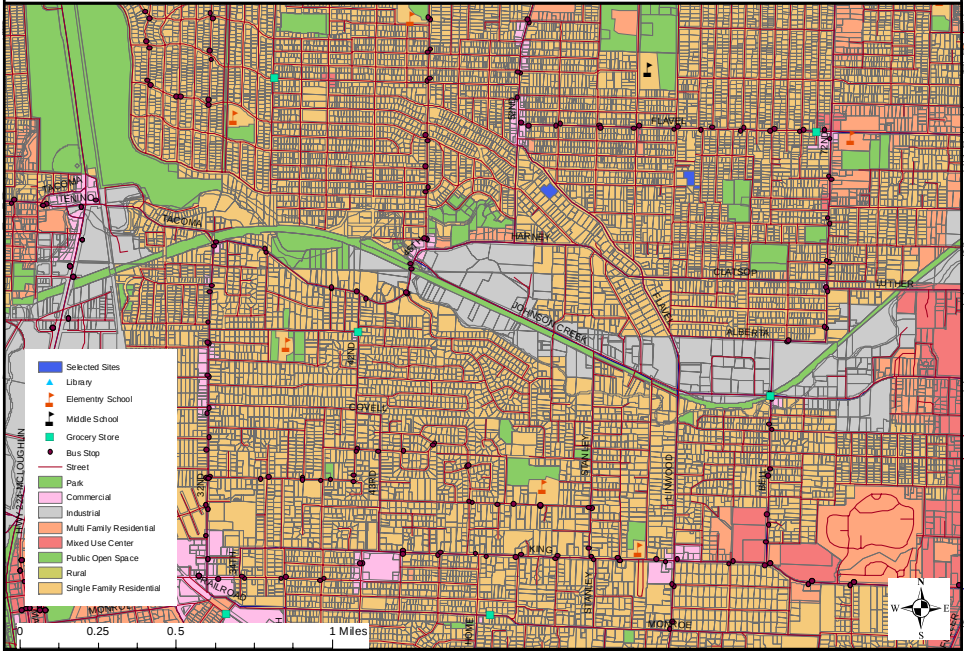
Criteria Fulfillment for Selected Sites

Original Criteria	Site 1	Site 2	Site 3
Area of lot in feet and meters 43,560 sq. feet = 1 acre (13,277 meters)	44,417	43,840	44,580
Distance to Closest Bus Stop 1320 feet (1/4 mile or .4 km)	603 (.1 mile)	872 (.16 mile)	872
Distance to Closest public elementary School 5280 feet (1 mile or 1.61 km)	2,738 (.5 mile)	2,814	2,184
Distance to Closest public middle school 5280 feet (1 mile or 1.61 km)	6,230 (1.8 miles)	2,023 (.4 mile)	2,023
Distance to closest full service grocery 5280 feet (1 mile or 1.61 km)	2,042	2,285	2,285
Distance to closest neighborhood park 1320 feet (1/4 mile or .4 km)	1,063 (.2 mile)	681	681
Distance to closest Public Library in 5280 feet (1 mile or 1.61 km)	4,927 (.9 mile)	872	872
Land Value	\$73,500	\$131,600	\$215,100
Ownership	Labor Assoc.	Church	City

**Sites 1 and 3 Community CoHousing Project
Initial Site Analysis Portland, Oregon 2005**



**Sites 2 and 3 Community CoHousing Project
Initial Site Analysis Portland, Oregon 2005**



Conclusions

- Site 1 is the most promising.
- Site visits and availability of land next step.
- Spend more time with the data before starting the analysis.
- Conduct more initial queries, with larger parameters before focusing on the project criteria.

Questions

