

Clinton County, Ohio Wind Energy Development Corridor

Clinton County Wind Energy

- As part of national and local energy efforts, Clinton County supports the development of wind energy facilities, especially along the Reesville Moraine where winds are regionally significant

"We need to position ourselves to be active in alternative energy."

-Clinton County Commission President Randy Riley, February 2011

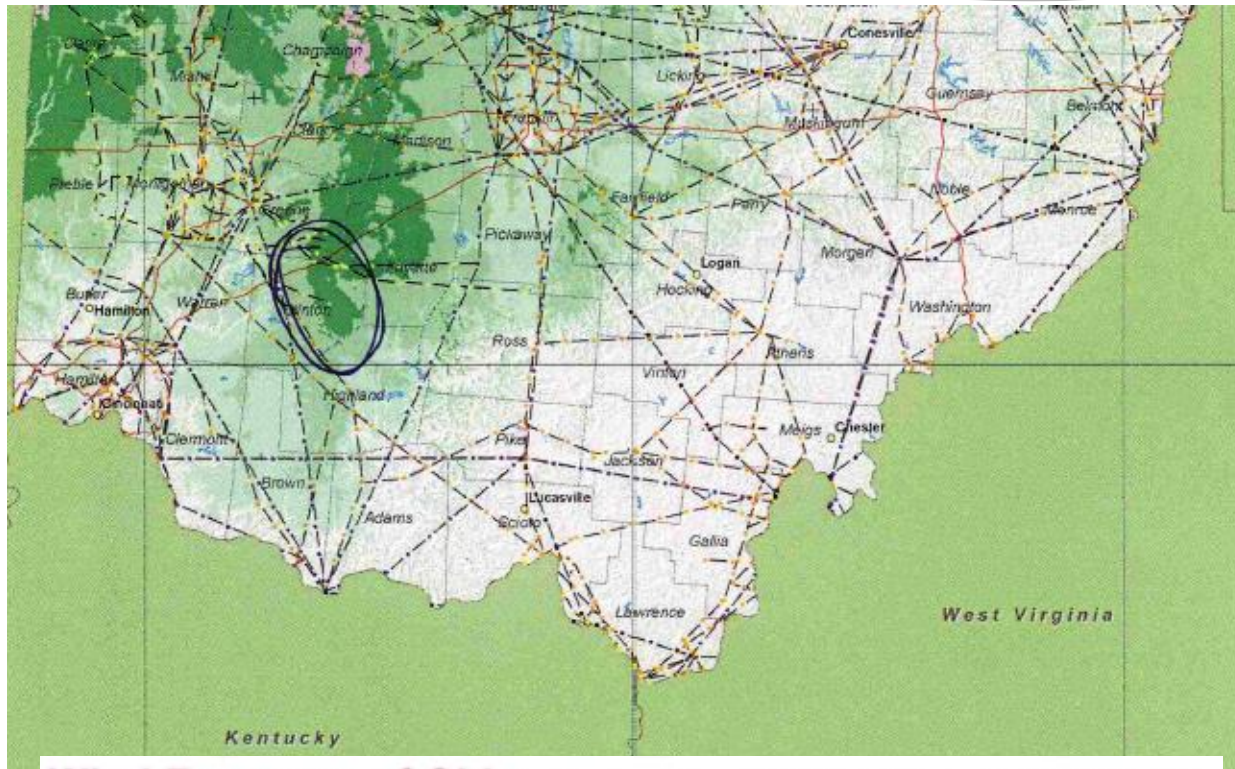
- The data is provided by the Clinton County Regional Planning Commission as part of this strategy, additional information is available by request



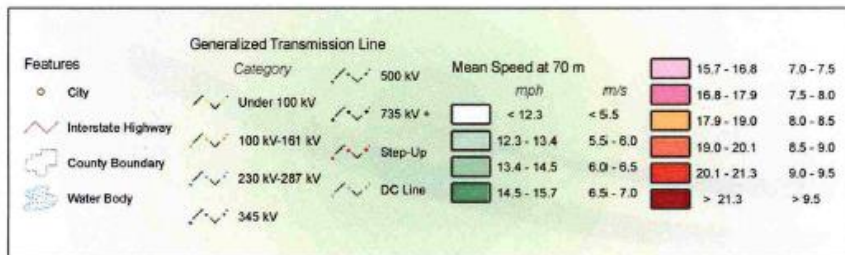
- The Corridor is near Wilmington, Ohio in Clinton County: close to major energy users, with over 5 million residents in 3 major metropolitan areas, all within a 60 mile radius
- The Corridor is part of the global utility AES' system, an \$18bil company and on the PJM national grid



- Both I-71 and a CSX/Rail America rail line cross the Corridor, providing excellent transportation access
- Clinton County was one of Ohio's first to designate an Alternative Energy Zone (AEZ) which provides a property tax incentive for utility scale projects



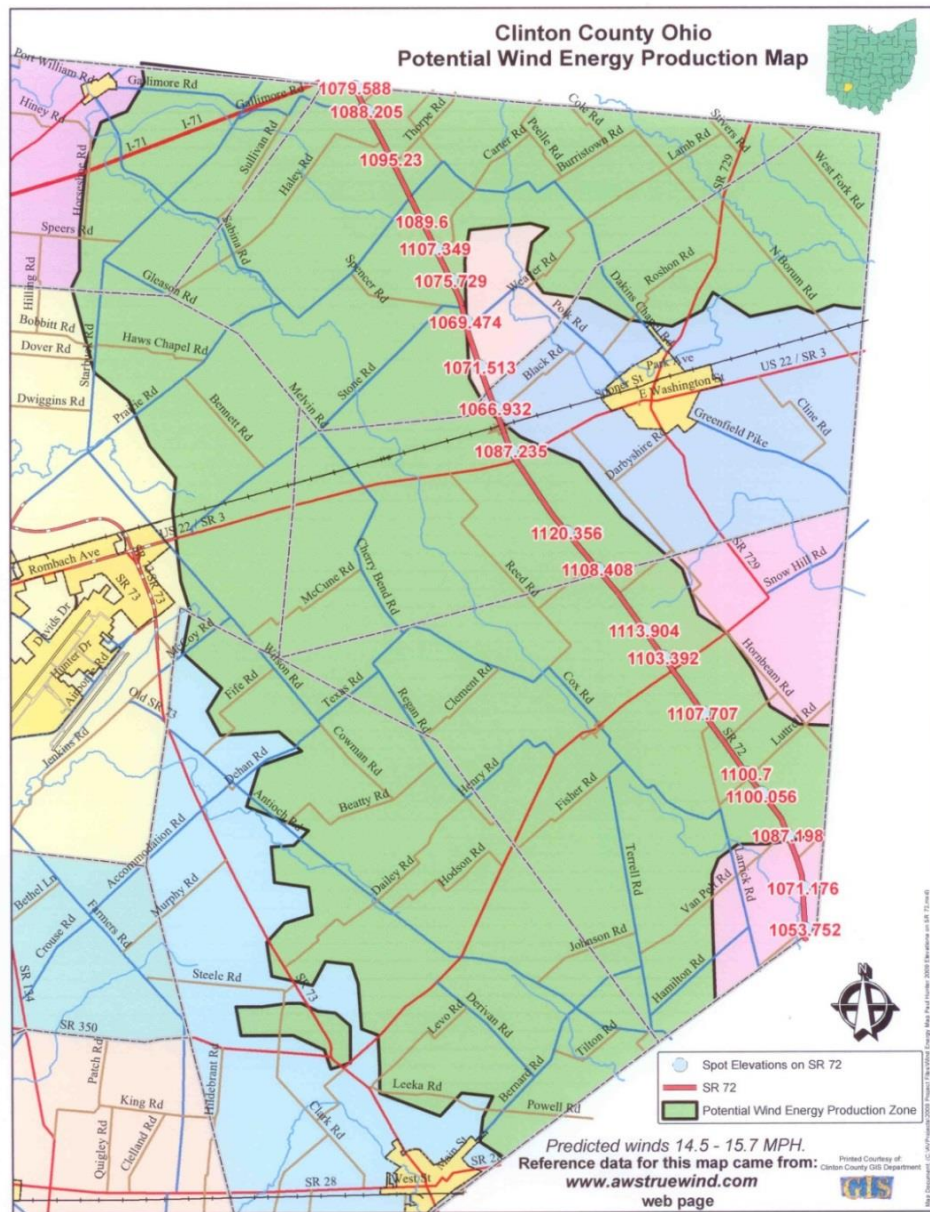
Wind Resource of Ohio Mean Annual Wind Speed at 70 Meters



AWS Truewind

Projection: Transverse Mercator,
UTM Zone 17 WGS84
Spatial Resolution of Wind Resource Data: 200m
This map was created by AWS Truewind using the MesosMap system and historical weather data. Although it is believed to represent an accurate overall picture of the wind energy resource, estimates at any location should be confirmed by measurement.
The transmission line information was obtained by AWS Truewind from the Global Energy Decisions Velocity Suite. AWS does not warrant the accuracy of the transmission line information.

- Regionally significant winds combined with an outstanding transmission network



- The corridor is centered on Ohio State Route 72, along a glacial moraine and the watershed boundary between the Little Miami and Scioto Rivers
- The predicted winds are modeled on daily observations from the Wilmington Air Park (ILN) Airport- adjacent to the corridor



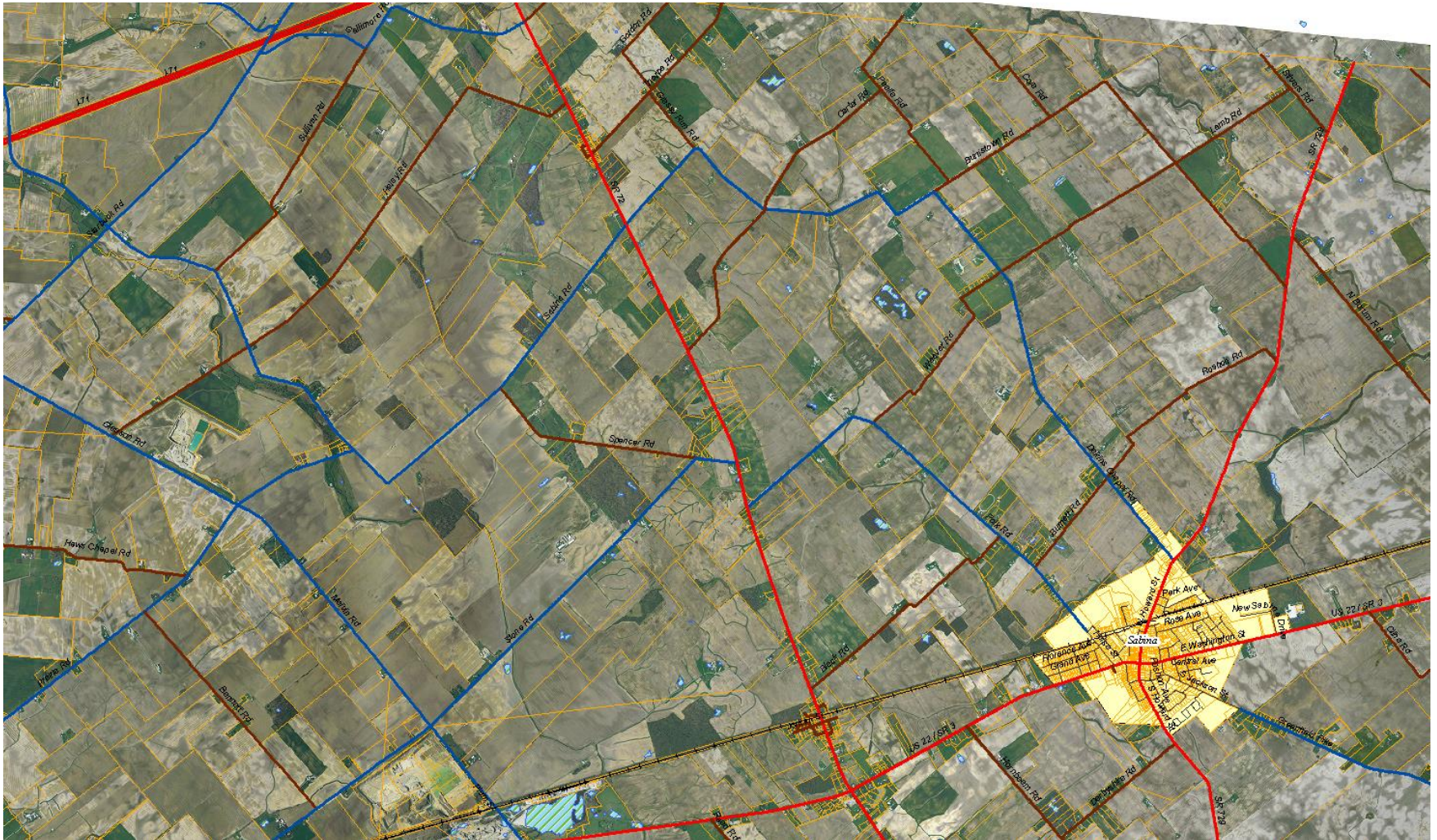
“At least 75-80 people showed up to hear about the potential for wind power in Clinton County, resulting in a standing-room-only crowd. Representatives from two different wind power developers spoke about the nature of hosting wind turbines on farm property.”

“Interest Whirls Around Wind Power” May 2009
(*Wilmington News Journal* photo/Brandon Smith)

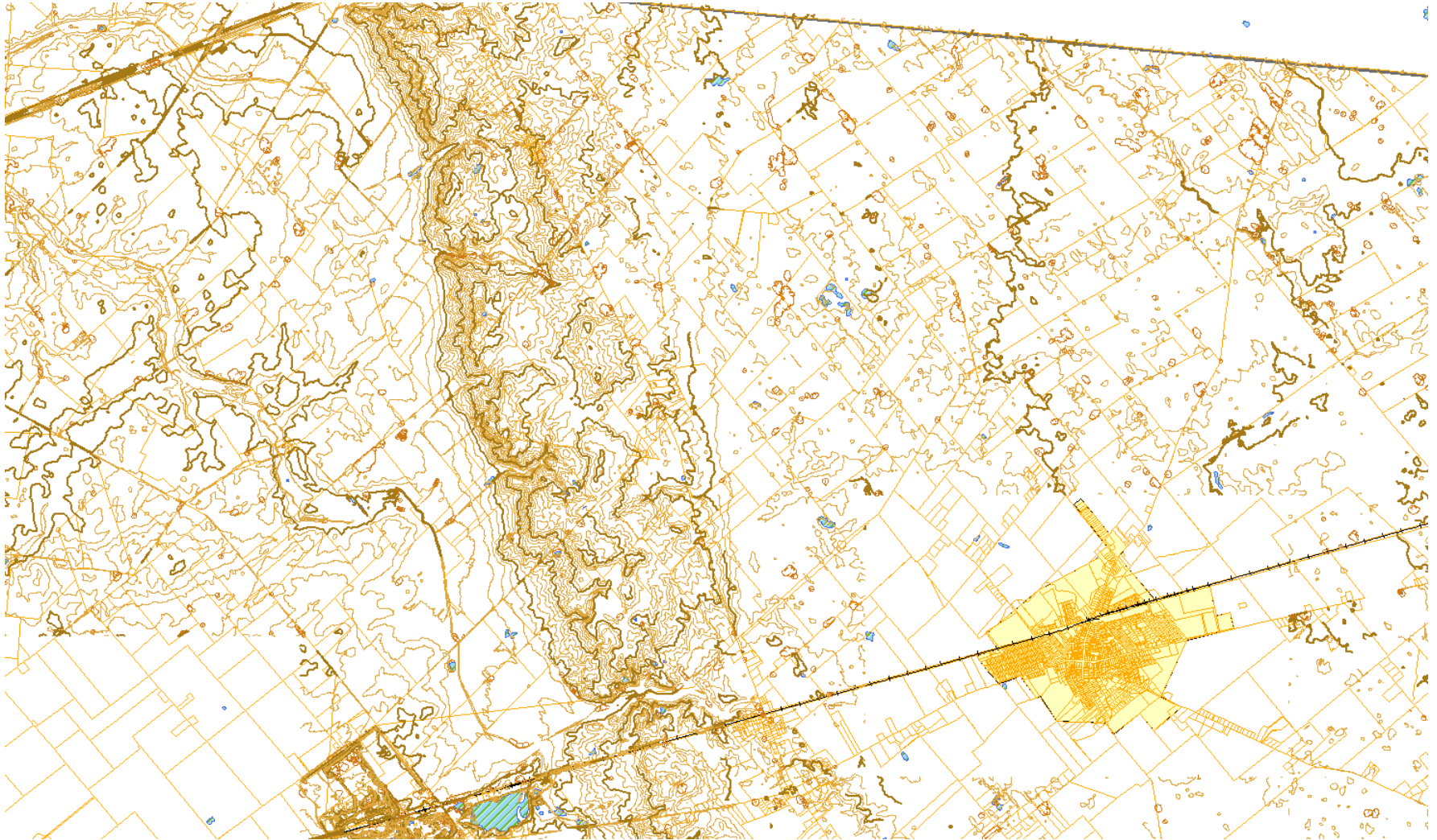
- Clinton County, the local Farm Bureau and local citizens generally, are supportive of wind development in the Corridor
- Informational sessions provided by various utility scale firms have helped educate the community on the opportunity and issues

	A	B	C	D	E	F	G	H	I	J	K	L
1	Jan mph 7.9	Feb 12.7	Mar 17.3	Apr 10.1	May 12.0	Jun 8.8	Jul 7.2	Aug *3.3	*4.9	Oct *4.9	Nov *2	Dec 10.3
2	12.2	7.3	12.2	10.7	*4.2	8.7	8.1	7.3	5.9	11	*3.9	10
3	7.6	6.5	3.9	14.6	*4.0	13.1	7.7	5.9	*3.5	12.3	6.9	13.4
4	9.4	10.7	5.8	6.9	8.1	10.5	*2.6	10.7	*4.2	8.1	5.5	6.3
5	6.3	7.4	13.8	9.1	*4.5	8.2	5.6	*2.4	*4.7	*1.4	7.5	*4.7
6	5.8	9	17.2	14.5	5.1	*2.3	*4	*4.6	5.2	11.7	5.7	*4.5
7	17.5	15.3	16.4	14.5	6.2	6	6.2	*2.5	*2.1	10.9	12.7	6.9
8	13.2	7.5	16.7	11.1	6.4	8.9	*2.5	7.7	*2.1	5.5	7.1	9.2
9	8.8	6.2	9.8	5.8	14.2	7.6	*4.6	9.8	*4.1	8.9	*3.7	25.5
10	8.1	15.4	16	11	*4.8	*4.5	*4.7	8.7	6.2	5.9	8.1	18.6
11	7.3	19.8	15.3	12.6	9.2	7.7	8.6	7	5.9	5.1	14	10.9
12	7.7	20.7	8.2	9	*3.6	5.2	5.8	7.4	6.2	6.3	8.9	7
13	13.9	5.6	7.8	10.7	15.5	*3.9	6.6	*3.3	5.7	8.5	*4.6	6.6
14	10.4	9.3	7.3	9.7	12.1	*4.6	5.9	*1	*1.7	11.1	*3.6	11
15	13.07	7.2	5.9	8.5	5.8	*3.5	7.8	*1.7	*3.3	8.4	*4.4	11.6
16	7.6	5.4	*3.3	6.4	12.4	8.1	10.3	5.2	10.2	9.9	11.7	*3.9
17	14.2	8.6	5.6	*3.6	8.1	10.7	7.9	5.3	7.3	8.8	8.9	5.1
18	13.3	18.9	11.5	*3.3	*3.5	*4.3	7.8	8.4	6.7	*4.7	7.9	*4.2
19	5.6	18.5	10.7	10.2	*2.7	9.4	*1.4	7.5	6.7	8.2	7.9	8.1
20	7.8	10.1	6.9	12.5	5.2	12.4	*3.2	11.7	7.6	9.5	*4.5	6.1
21	9.2	15.3	*3.4	14.1	*3.7	5.4	*3.4	10.2	8.6	6.2	*1.8	7.3
22	8.8	13.2	*3.2	12.9	*1.9	*3.4	6.8	6.4	6.8	5.4	7.9	*4.8
23	13.5	6.1	9.8	6.4	*3.5	6.7	8.5	5.2	*4.6	11.3	5.6	9.6
24	8.7	6.4	9.6	15.1	*4.1	*2.3	5.2	*3	*4.3	10.5	5	10
25	*2.9	9.9	12.9	15.5	8	7.8	10.1	*2.6	6	*3.7	12.7	19
26	*4.3	9.7	5.7	9.6	7	8.8	8.3	*4	*2.3	*4.9	13.4	13.1
27	9	14.8	6.4	14.1	8.2	*4.6	*4.4	*3	9.8	*4.5	10.2	14.1
28	9.3	15.6	10.1	8.8	8.1	9.4	5.2	5.8	18.9	*3.8	7.8	16.4
29	14.4		19.5	5.8	9.1	12.1	*4.4	10.2	12.7	6.4	12.6	6.4
30	13.4		6.9	15	6.2	9.6	*3.7	7.1	7.5	15.9	10.1	6.9
31	12.2		11.4		*4.8		5.9	6.3		12.6		9.2
32	avg 9.8	11.2	10	10.4	6.8	7.3	5.9	6	6.3	7.9	7.6	9.7
33	**max 31	49	36	40	43	51	26	32	32	26	26	45
34												
35	*too low for current technology			** Max 2 minute gusts			Note: even low average days have periods of useful speeds					
36	Source: Speeds recorded @ Airborne/Wilmington Airport by NWS @ 10 meters											
37	Using the Danish wind speed calculator @ http://www.talentfactory.dk/en/tour/wres/calculat.htm ; adding 30 meters											
38	for SR 72 wind comidor elevation + 100 meter tower height a 1.442 multiplier can be applied to the 10 meter values.											
39	For an 80 meter met tower in the comidor a 1.413 multiplier applies											
40	For a 33 meter small turbine tower a 1.119 mutplier applies.											
41	To convert MPH to meters per second (M/sec) divide speeds by 2.2369											
42	chart prepared by Paul Hunter budhunter@verizon.net											

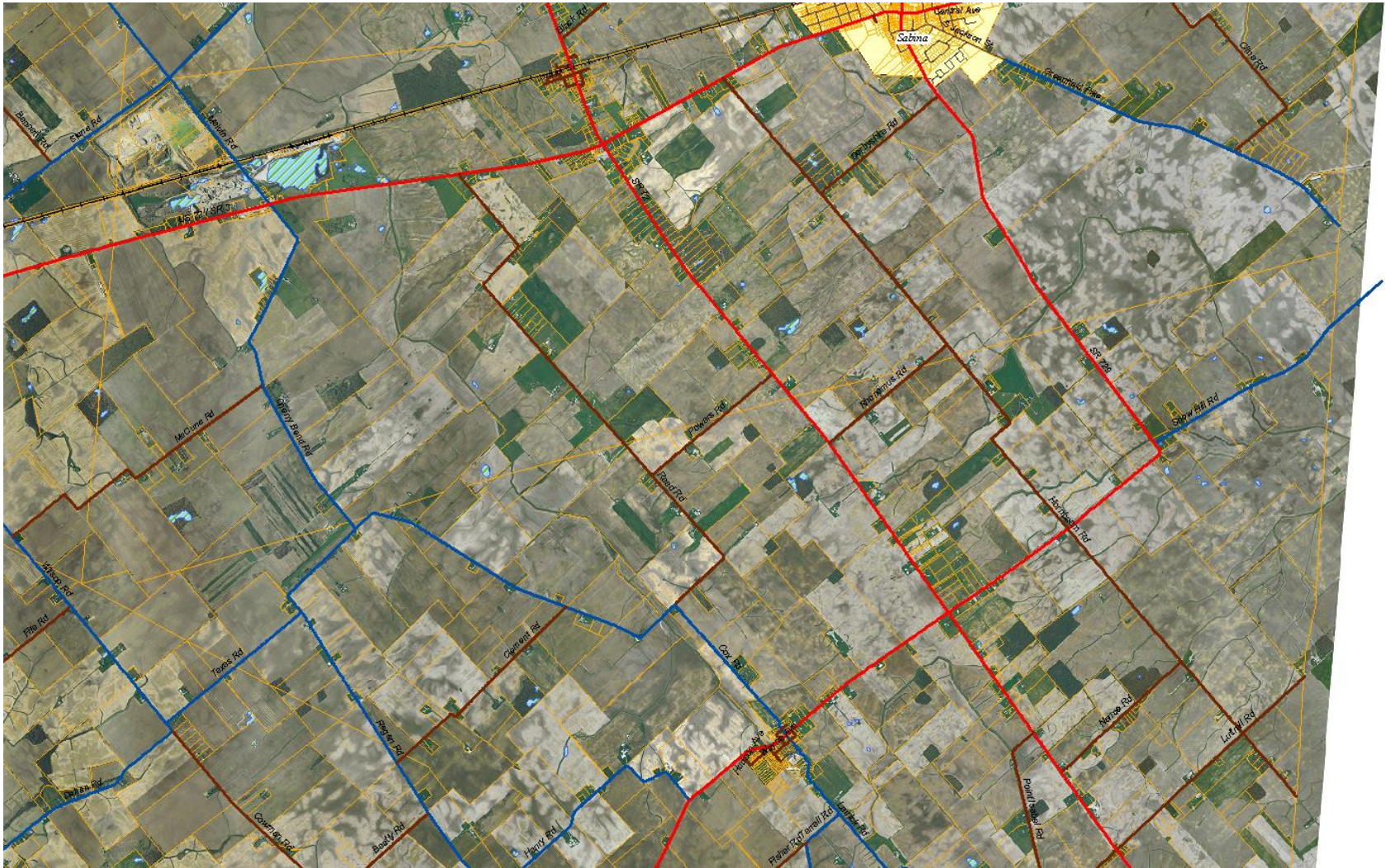
- Land in the Corridor is mostly in crop production on large lots, with a low population density (north section)

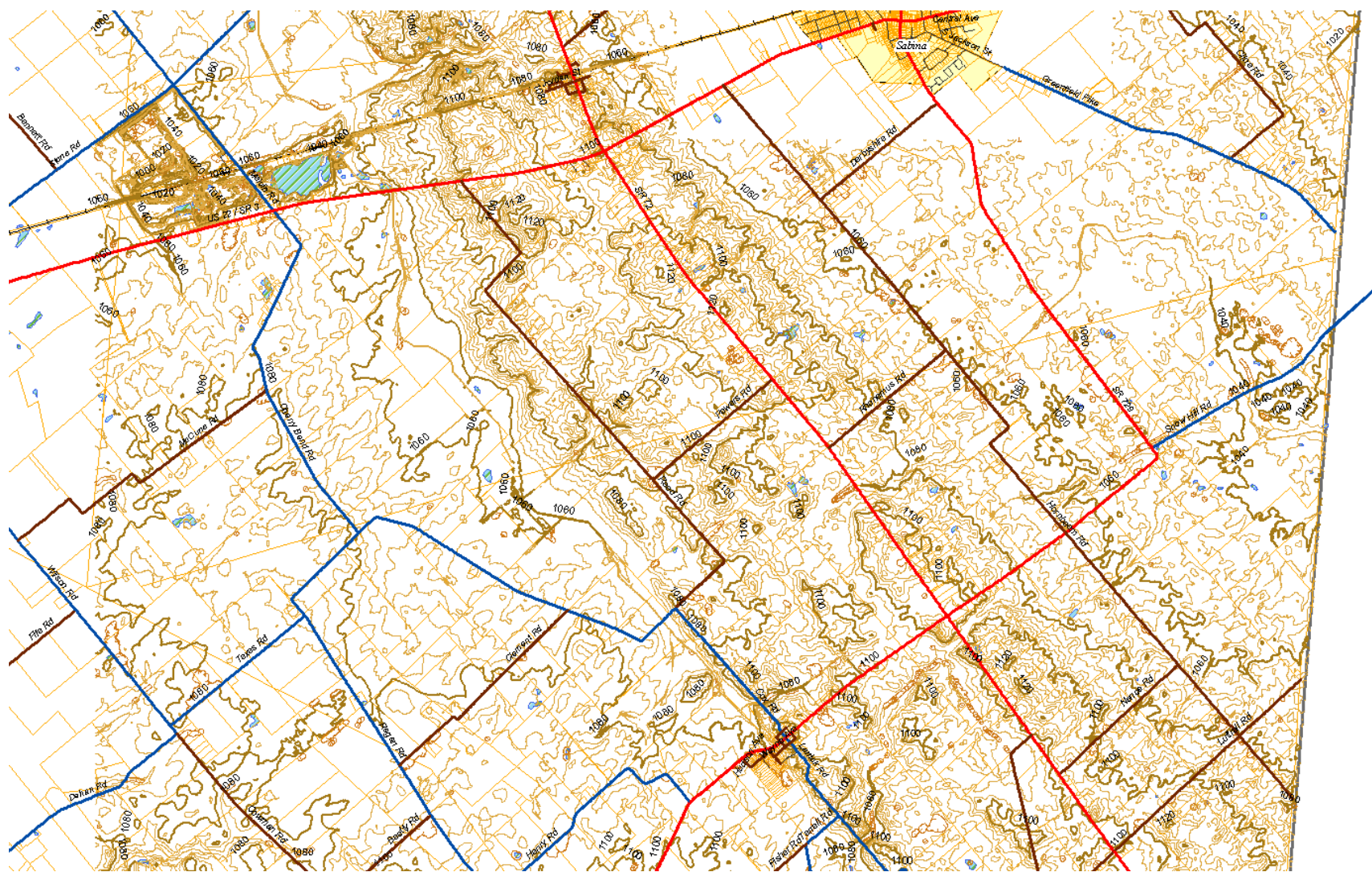


- The Corridor is centered on a glacial moraine, it is a flat topography with very few wetlands (north section)



- Likewise, the south section is also primarily large lot, agricultural production





For More Information:



69 North South Street • Suite 100
Wilmington, Ohio 45177-2211
Phone: 937-382-3582
Fax: 937-383-1489
staff@clintoncountyrpc.org