Rural Landowners and Urban Sprawl: Examining Influences on Landowner Decisions to Sell or Develop Their Land

A Preliminary Report of Survey Results

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Project Overview

The urbanization of rural areas throughout the United States has become an increasingly important issue for rural and farming communities and the fish and wildlife habitats which thrive in their environs. In 1992, a report to Michigan's governor on <u>Michigan's Environment and</u> <u>Relative Risk</u> highlighted the lack of land use planning as a "high-high" risk for the future well-being of Michigan. The conversion of rural land to urbanized uses could not occur without rural landowners' participation in the sale and development of their land. Hence, it becomes important to understand the factors that motivate rural landowners to make such decisions regarding their land. The objective of this research was to determine the mechanisms underlying landowners' intentions to sell or develop all or part of their land. This study specifically focused on rural landowners in the Huron River Watershed and their intentions to sell or develop their land within 5 to 10 years. The Huron River Watershed is located within Southeast Michigan and is currently faced with rapid development, as it is adjacent to Detroit and its outlying suburbs.

<u>Methods</u>

All landowners known to own 10 or more acres within the watershed were selected to participate in a survey about their land, plans for their land and general land-use issues. Landowners were identified through the use of plat maps and property tax records. The survey was developed using a slightly modified version of Reasoned Action theory, one of the most widely tested and empirically successful models used by social scientists for understanding human behavior. The survey was administered during the summer of 2000 by the Institute for Public Policy and Social Research at Michigan State University. Up to three mailings were utilized to increase response: 1) an initial survey mailing with cover letter and postage paid return envelope; 2) a reminder postcard (sent approximately one week later); and 3) a final survey mailing with cover letter and postage paid return envelope (sent approximately one month after the original mailing). The original sample consisted of 7,157 persons; after removing non-deliverables, duplicates (respondents who identified themselves as owning more than one parcel in the area and as having received more than one survey), and ineligible persons (deceased persons as well as those who no longer owned land in the area), the final useable sample size was 6.699. Of these, 3,380 responded to the survey, resulting in a 50% response rate.

Findings

A complete presentation of univariate results for the survey is presented below; the results follow the order of questions as presented in the survey. More sophisticated analyses are forthcoming in a technical report and papers to be submitted to academic journals. Overall, the survey results indicate that landowners in the Huron River Watershed perceive rapid land use change within the area and are fairly concerned about its ramifications for the quality of rural life and the environment. While economic growth, expansion of community services and greater employment opportunities--all of which tend to come along with urban development--are valued, these are valued substantially less than other values more commonly associated with undeveloped rural landscapes (e.g., environmental amenities, outdoor recreation, quality of life). Even so, slightly over one-third (37%) of landowners believe it is at least "slightly likely" that they would sell or develop all or part of their land in the next 5 to 10 years.

Note: Where relevant, percentages may not always add to 100% due to rounding.

1. Approximately how large is your parcel of land? ______ ACRES

<u>Note:</u> We contacted only those people in the Huron River Watershed who, according to tax records and/or plat maps, owned at least 10 acres of land; however, there were 155 respondents who reported having less than 10 acres of land. This could either be due to an error in the sample selection process or the respondents may have already sold or subdivided their land.

For those with 10 or more acres: Average acreage= 33.3 acres Standard Deviation = 59.1 acres Number of valid cases (N) = 3169

Median = 12 acres Mode = 10 acres Range = 10 to 1300 acres

2.	In what township	is	vour	parcel of land located?
			J	

TOWNSHIP

County	<u>Township</u>	#	<u>%</u>	County	<u>Township</u>	#	<u>%</u>
Ingham	Stockbridge	74	2	Washtenaw	Ann Arbor	40	1
Jackson	Grass Lake	8	< 1		Dexter	148	4
	Waterloo	12	< 1		Freedom	97	3
Livingston	Brighton	118	3		Lima	275	8
	Genoa	79	2		Lodi	51	2
	Green Oak	114	3		Lyndon	90	3
	Hamburg	71	2		Northfield	230	7
	Hartland	43	1		Pittsfield	6	< 1
	Marion	56	2		Salem	117	3
	Oceola	9	< 1		Scio	187	6
	Putnam	191	6		Sharon	136	4
	Unadilla	158	5		Superior	85	3
Monroe	Ash	22	1		Sylvan	131	4
	Berlin	16	< 1		Webster	219	6
Oakland	Commerce	13	< 1		Ypsilanti	10	< 1
	Highland	82	2	Wayne	Brownstown	9	< 1
	Lyon	66	2		Huron	63	2
	Milford	61	2		Romulus	6	< 1
	Novi	0	0		Sumpter	14	< 1
	Springfield	52	2		Van Buren	42	1
	Waterford	0	0				
	W. Bloomfield	2	< 1	Not yet class	ified *	59	2
	White Lake	76	2	Missing *		42	1

N = 3380

* These respondents either did not report anything or they reported a county, a city, a group of townships, or a township not within the watershed boundaries. These cases are being cross-checked with the original information used to select the sample.

<u>Note:</u> Some of these townships have very few respondents (and two of them have none). This is because some of the townships do not overlap substantially with the watershed.

3. What two roads form the intersection nearest to your land? ______ ROAD ROAD

Not reported here; this information will later be used to georeference the survey data.

4. About how long have you owned this parcel of land? _____ YEARS

Average = 17.3 years	Median $= 14$ years
Standard Deviation $= 13.3$ years	Mode = 10 years
N = 3275	Range = < 1 year to 80 years

<u>Note:</u> Some respondents (approximately 1% of the total sample) indicated that the land had been in their family for more than 81 years.

5. How did you acquire this land? (Check all that apply.)

Purchase	91%
Inheritance	8%
Gift	2%
Marriage	1%
Other	1%

N = 3380

Note: Specifications on "other" not yet analyzed.

6. In what type of area do you consider this land to be located in? (Check one.)

Rural area	32%
Developing rural area	62%
Suburban area	2%
Urban fringe area	2%
Urban area	<1%
Unsure	1%

N = 3326

7. Are any of the following natural features located **on or near** your land (within 5 miles)? (Check all that apply.)

Stream or river	67%
Lake	57%
Wetlands	80%
State, city or federally protected lan	ıd
(such as a park or refuge)	46%
Other	

N = 3380 Note: Specifications on "other" not yet analyzed. 8. Which of the following uses do you make of this land? (Check all that apply.)

Residence Agricultural Production	80%
/ Farming	
Investment	
Development	4%
Recreation	21%
Other	8%
N = 3380	
Note: Specifications on "othe	er" not yet analyzed.

9. *If you farm this land*, please indicate your level of agreement or disagreement with each of the following statements. (Circle one response for each).

		1 Strongly Agree	2 Mildly Agree	3 Unsure	4 Mildly Disagree	⁵ Strongly Disagree	(N)
a.	In order to make a decent living today, farming requires an off-farm income.	74%	18%	3%	3%	2%	(761)
b.	Farming will remain in my family for generations to come.	6	8	41	10	34	(749)
C.	I cannot afford to keep farming in the future.	28	16	35	13	9	(727)
d.	My family would be better off if I sold or developed my land.	38	16	18	11	18	(739)
e.	My retirement will mark the end of farming in my family.	35	12	34	8	10	(727)

10. Do you own more than one parcel of land within the area indicated on the front of the survey? (Check one.)

Yes	.20%
No or Blank	.80%

N = 3380

<u>Note</u>: Three additional questions were contingent upon a "yes" answer to question 10; however, because numerous questionable responses were recorded, these are being cross-checked with the original surveys as well as land ownership records.

14. How familiar are you with each of the following government and other land use programs/organizations? (Circle one response for each.)

		1 Very Familiar	2 Somewhat Familiar	3 Not Familiar	(N)
a.	The Purchase of Development Rights program (PDR)	8%	22%	70%	(3237)
b.	Michigan's Farmland and Open Spaces Preservation Act, or P.A. 116	10	25	66	(3241)
C.	Conservation Reserve Program (CRP)	6	20	75	(3225)
d.	Subdivision Control Act or the Land Division Act	7	22	71	(3230)
e.	Southeast Michigan Land Conservancy	3	22	74	(3229)
f.	Nature Conservancy	9	30	61	(3231)

15. Do you believe that rural land should be protected from urban development? (Check one.)

Definitely	
N = 3300	

N = 3300
16. How important are each of the following reasons for protecting rural land? (Circle one response for each.)

		1	2	3	4	
		Very Important	Somewhat Important	Not Important	Unsure	(N)
a.	…to help maintain the ecological health of Michigan	74%	23%	2%	1%	(2852)
b.	to allow people to work close to the land	37	43	15	6	(2827)
C.	to provide a high quality of life	65	28	4	3	(2824)
d.	to provide an opportunity for outdoor recreation	53	37	9	1	(2830)
e.	to keep Michigan visually beautiful	66	30	3	1	(2846)
f.	to maintain the farming way of life in Michigan	60	31	7	2	(2844)
g.	to help preserve community values in Michigan	54	35	9	3	(2833)
h.	to provide wildlife habitat	77	20	2	1	(2853)

17. The following is a list of things of possible importance to you. Please indicate the importance of each of them to you by circling the most appropriate response.

		1	2	3	4	
		Very	Somewhat	Not		(N)
		Important	Important	Important	Unsure	
a.	Community development	23%	49%	25%	3%	(3195)
b.	Environmental protection	69	28	2	1	(3278)
C.	Protection of animals and plants	66	29	4	1	(3262)
d.	Economic growth	21	52	24	3	(3236)
e.	Community services	20	57	20	3	(3235)
f.	Employment opportunities	21	46	30	3	(3229)
g.	Outdoor recreation	44	44	10	1	(3255)
h.	Job security	36	38	23	3	(3228)
i.	Quality of life	83	15	1	1	(3288)

18. Below is a list of different statements about land use. Please indicate your level of agreement or disagreement with each of the following statements.

		1 Strongly Agree	2 Mildly Agree	3 Unsure	4 Mildly Disagree	⁵ Strongly Disagree	(N)
a.	The impact of urban development is not as bad as people say it is.	7%	14%	9%	24%	46%	(3285)
b.	There is too much emphasis on short- term economic goals in land-use planning in Michigan.	42	25	22	7	4	(3271)
C.	Farmers have too much influence on land- use decisions in Michigan.	2	5	23	27	43	(3296)
d.	I feel powerless to prevent urban development.	42	31	10	12	5	(3284)
e.	Environmentalists have too much influence on land-use decisions in Michigan.	18	22	20	22	19	(3298)
f.	Most people are poorly informed about the impacts of urban development.	48	35	11	4	1	(3299)
g.	Developers have too much influence on land-use decisions in Michigan.	59	22	9	7	3	(3298)
h.	Land use is rapidly changing where my land is located.	58	28	5	6	2	(3296)
i.	There are too few government programs to help preserve rural land in Michigan.	32	19	32	9	8	(3296)
j.	Local government regulations promote development of rural land.	24	26	31	13	7	(3285)
k.	People who wish to develop rural land should be free to do so.	12	20	12	28	29	(3291)
Ι.	Keeping my land as it currently is will help prevent urban sprawl in the area.	39	30	11	11	9	(3293)
m.	Current government programs to protect rural land in Michigan do not work well.	29	26	40	4	1	(3295)

19. Please indicate how likely it is that you would **sell or develop all or part of your land within the next five to ten years**. Please answer on the basis of the piece of land selected at the beginning of the survey: (Check the most appropriate response.)

"I intend to sell or develop all or part of my land in the next five to ten years."

Extremely Likely	 20. Would you prefer to sell all
Quite Likely	 or just a part of your land?
Slightly Likely	 (Check one.)
Neither Likely nor Unlikely	All 52%
Slightly Unlikely	Part 33%
Quite Unlikely	Either 7%
Extremely Unlikely	Unsure 8%
5	
N = 3316	N = 1197

21. In your opinion, what is the probability that you will actually be able to do what you intend to do with your land? (Check one.)

Response:	% Choosing:
100%	
75% to 99%	31%
50% to 74%	16%
25% to 49%	6%
1% to 24%	
0%	2%
Unsure	10%

N = 3300

22. What kinds of things might keep you from doing what you intend to do with your land? Please explain.

Not yet analyzed.

23. If you were to *sell* all or part of your land, would you have a preference as to whom? (Check all that apply.)

Developer	8%
Family farm	24%
Farm business	9%
Government	3%
Private trust	17%
I don't care	19%
Other	39%

N = 3380

Note: Specifications on "other" not yet analyzed.



Please rate the following statements accordingly:

24. Selling or developing all or part of my land in the next five to ten years would be:

	extremely	quite	slightly	neither	slightly	quite	extremely		(N)
good	12%	13%	7%	23%	6%	15%	25%	bad	(3224)
wise	13	16	8	27	4	12	19	unwise	(3171)
harmful	11	11	11	37	5	13	13	harmless	(3138)

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3	-	-	~	

	-	extremely	quite	slightly	neither	slightly	quite	extremely	(N)
25.	Increasing urban development in South East Michigan is:	3%	8%	10%	10%	17%	29%	22%	(3261)
26.	Increasing urban sprawl in the area where my land is located is:	3	6	8	10	17	27	30	(3264)
27.	The current rate of land use change in South East Michigan is:	2	6	6	13	16	32	24	(3213)
28.	Protecting the visual beauty of the area where my land is located is:	35	31	12	9	5	5	3	(3261)
29.	Protecting the ecological health of the area where my land is located is:	38	27	12	9	5	5	3	(3258)
30.	Expanding the community services available where my land is located is:	6	14	21	36	9	8	6	(3238)
31.	Protecting outdoor recreation opportunities where my land is located is:	22	26	18	22	5	4	3	(3248)
32.	Promoting economic growth where my land is located is:	6	13	18	28	12	12	11	(3234)
33.	Promoting the quality of life of people living near my land is:	26	30	17	18	5	3	2	(3231)

Please rate the likelihood of each of the following statements using the same format as above.

likely 🔶 unlikely extremely quite slightly neither slightly quite extremely (N) Selling or developing all or part of my land in 34. the next 5 to 10 years will increase urban 19 21 21 16 3 8 13 (3261) development in South East Michigan: Selling or developing all or part of my land in 35. the next 5 to 10 years will increase urban 22 21 21 15 8 11 (3253) 4 sprawl in the area where my land is located:

▶ bad

_		extremely	quite	slightly	neither	slightly	quite	extremely	(N)
36.	Selling or developing all or part of my land in the next 5 to 10 years will increase the current rate of land use change in South East Michigan:	16%	20%	24%	19%	4%	7%	10%	(3228)
37.	Selling or developing all or part of my land in the next 5 to 10 years will harm the visual beauty of the area where my land is located:	24	19	15	17	4	10	11	(3248)
38.	Selling or developing all or part of my land in the next 5 to 10 years will harm the ecological health of the area where my land is located:	20	17	16	19	5	11	13	(3235)
39.	Selling or developing all or part of my land in the next 5 to 10 years will help expand the community services available where my land is located:	4	7	11	30	6	19	24	(3230)
40.	Selling or developing all or part of my land in the next 5 to 10 years will harm outdoor recreation opportunities where my land is located:	12	11	11	25	6	16	21	(3240)
41.	Selling or developing all or part of my land in the next 5 to 10 years will promote economic growth where my land is located:	7	11	16	26	6	15	19	(3234)
42.	Selling or developing all or part of my land in the next 5 to 10 years will promote the quality of life of people living near my land:	3	5	7	29	9	21	25	(3235)
43.	Most people who are important to me think I should sell or develop all or part of my land in the next 5 to 10 years:	9	8	6	27	3	12	35	(3251)
44.	Most members of my family think I should sell or develop all or part of my land in the next 5 to 10 years:	10	8	6	24	3	11	38	(3251)
45.	Most of my close friends think I should sell or develop all or part of my land in the next 5 to 10 years:	9	8	6	27	3	12	35	(3244)
46.	Most members of the community where my land is located think I should sell or develop all or part of my land in the next 5 to 10 years:	3	4	5	36	4	15	32	(3234)

likely ◀ → unlikely

		extremely	quite	slightly	neither	slightly	quite	extremely	(N)
47.	Most of my co-workers think I should sell or develop all or part of my land in the next 5 to 10 years:	5%	5%	5%	43%	2%	9%	30%	(3160)
48.	Most farmers in the community where my land is located think I should sell or develop all or part of my land in the next 5 to 10 years:	2	3	3	41	4	13	34	(3176)
49.	Most environmentalists think I should sell or develop all or part of my land in the next 5 to 10 years:	1	1	1	35	4	14	42	(3169)
50.	Most local government officials think I should sell or develop all or part of my land in the next 5 to 10 years:	4	5	5	46	5	11	24	(3156)
51.	Generally speaking, I want to do what most people who are important to me think I should do:	6	10	8	33	4	10	29	(3197)
52.	Generally speaking, I want to do what most members of my family think I should do:	12	17	13	27	4	8	20	(3208)
53.	Generally speaking, I want to do what most of my close friends think I should do:	4	6	8	39	4	10	28	(3201)
54.	Generally speaking, I want to do what most members of the community where my land is located think I should do:	2	3	7	38	4	12	33	(3203)
55.	Generally speaking, I want to do what most of my co-workers think I should do:	2	2	4	41	3	10	38	(3165)
56.	Generally speaking, I want to do what most farmers in the community where my land is located think I should do:	4	5	8	40	5	9	28	(3194)
57.	Generally speaking, I want to do what most environmentalists think I should do:	5	9	14	32	5	8	26	(3197)
58.	Generally speaking, I want to do what most local government officials think I should do:	1	2	4	37	4	11	40	(3205)

likely ◀ → unlikely

BACKGROUND INFORMATION

In order for us to more fully understand people's responses to the previous questions, we need to know a few things about your background. Remember that your responses are completely confidential and that neither your name nor your address will be directly linked to your responses in any way.

59. In what year were you born? 19_____

<u>Converted to age:</u> Average = 54.8 years Standard Deviation = 13.2 years N = 3266

Median = 53 years Mode = 50 years Range = 22 to 99 years

60. Are you male or female?

Male	66%
Female	34%

N = 3284

61. How many children (under the age of 18) currently live in your household? _____CHILDREN

No Children	.64%
1 Child	.13%
2 Children	.15%
3 or more Children (up to 12)	. 9%

- N = 3181
- 62. Do you have children who will inherit your land? (Check one.)



64. How do you feel about your current economic situation? (Check one.)

Not able to make ends meet	1%
Barely able to make ends meet	7%
Have enough to get by2	23%
Comfortable	56%
Affluent1	1%
Other	1%

N = 3270

Note: Specifications on "other" not yet analyzed.

65. What is your perception of the economic situation of most other people in the area in which your land is located? (Check one.)

Not able to make ends meet	<1%
Barely able to make ends meet	3%
Have enough to get by	21%
Comfortable	59%
Affluent	11%
Other	6%

N = 3380

Note: Specifications on "other" not yet analyzed.

66. What was your gross household income (before taxes) in 1999? (Check one.)

Less than \$20,000	. 5%
\$20,000 to \$39,999	
\$40,000 to \$59,999	17%
\$60,000 to \$74,999	16%
\$75,000 or more	

N = 2865

67. The next part of this research project will involve interviews with people who own property in South East Michigan. Would you be willing to be interviewed? (Check one.)

Yes	.53%
No	.47%

N = 3250

If you have any questions or comments that you would like to share with us, please use the space below or enclose additional sheets.

End comments not yet analyzed.