

A STUDY OF DIFFERENTIAL TAX ASSESSMENT

IN SELECTED AREAS OF

WASHINGTON COUNTY, OREGON

by

Jerry C. Heucke

A RESEARCH PAPER

submitted to

THE DEPARTMENT OF GEOGRAPHY

OREGON STATE UNIVERSITY

in partial fulfillment of
the requirements for the
degree of

MASTER OF SCIENCE

February 1978

Directed by

Dr. J. R. Pease

ACKNOWLEDGEMENTS

I would like to express my gratitude to Dr. Jim Pease for providing me with the initial idea for this research paper and for his help and constructive criticism throughout its writing.

I would also like to thank Mr. John Krautscheid of the Washington County Department of Assessment and Taxation for his help in locating the tax lot data used in this paper and for giving me additional aid which expedited the completion of this research.

Last, but certainly not least, I want to extend my appreciation to my family who have supported me throughout my academic career and have given me encouragement when needed.

TABLE OF CONTENTS

	Page
LIST OF FIGURES	
LIST OF TABLES	
ABSTRACT	1
INTRODUCTION	1
BACKGROUND	2
METHODOLOGY.	3
Selection of Study Area	4
Description of Township Sections.	5
Data Collection	8
Data Analysis	12
STUDY FINDINGS	12
Participation in the FUA Program.	12
Effects of NFUA Land Values on Participation in FUA	18
Average Lot Sizes--FUA, NFUA Land	22
Net Gain of FUA Land.	23
Conversion of FUA Acreage to Non-Agricultural Uses.	25
SUMMARY AND CONCLUSIONS.	26
FOOTNOTES.	27
APPENDIX	29
BIBLIOGRAPHY	30

LIST OF TABLES

	Page
Table 1. Participation in FUA 1963-1977	12
Table 2. Tualatin Section--Aggregate Data	13
Table 3. Bronson Creek Section--Aggregate Data.	15
Table 4. Assessed Value/Acre FUA-NFUA Land 1963-1977 Tualatin Section.	18
Table 5. Assessed Value/Acre FUA-NFUA Land 1963-1977 Bronson Creek Section	19
Table 6. Average Lot Size, FUA and NFUA	23

LIST OF FIGURES

	Page
Figure 1. Location Map of General and Specific Study Areas.	6
Figure 2. Tualatin Section Map.	7
Figure 3. Bronson Creek Section Map	9
Figure 4. Bronson Creek 1/4 Section Map	10
Figure 5. Participation in FUA.	21

ABSTRACT: Farm Use Assessment used as a planning tool to preserve farmland in Oregon has achieved mixed success. While some land enrolled in the program (especially near urban areas) has been converted to non-farm use, the majority of land has not. However, this may be due to lack of "opportunity profits" for landowners rather than to incentives designed into the program to prevent conversion. This paper examines the Farm Use Assessment program in certain areas of Washington County, Oregon. Tax lot data for the time period since the program was enacted was analyzed for those changes in land use which occurred on land enrolled in the program. This research shows that although farmland owners found the tax benefits of the program advantageous in holding down farming cost, these same benefits were not great enough to affect the profits to be gained from conversion of land to non-farm uses.

INTRODUCTION

Differential property tax assessment (sometimes called "Special Farm-Use Assessment" or "Farm Deferral") is a concept to provide reduction of property taxes for farmland owners. This reduction is accomplished by modifying established ad valorem property tax laws to allow farmland to be assessed at lower tax rates than other, higher economic uses of land such as residential or commercial. Thus, differential property assessment is essentially a tax break or subsidy for farmland owners.

The desire for such a special tax program stems from public concern over the cost of conversion of agricultural land (usually but not always on the urban fringe) to non-farm uses. Conversion costs the city resident in two ways. First, land is taken out of food production (which can possibly lead to higher food prices) and secondly, the aesthetic and environmental benefits of open space are pushed further from the city center. Conversion also costs the remaining farmers. Since their land is that much closer to the encroaching urban fringe its value rises and hence the taxes on the land, increasing the total production cost of farming. Additionally, conflicts between residential and agricultural uses can make farm operations more difficult, often

leading to restrictions on the use of pesticides, herbicides and farm machinery.

Oregon has had a differential tax program since 1963, the date it was established by the state legislature.¹ The primary goals of the program are to preserve open space, relieve the tax burden on farmers and prevent urban sprawl. Despite the fact that the program has been in effect for 15 years, few studies have been conducted which analyze if indeed the economic incentives (tax relief) are an effective land-use tool for achieving the original goals of the program.²

This paper will examine on a micro-scale the impact of Oregon's Farm Use Assessment program on agricultural land conversion. The use of the program by farmland owners will be described and an example shown of whether the tax incentives provided by the program are sufficient to offset the benefits of conversion. More specifically, the objectives of this research are:

- (1) To determine the amount of acreage in Farm Use Assessment (FUA) in a study area for each year of the program since its enactment (1963-1977).
- (2) To determine the net gain or loss of Farm Use Assessment land within the study area, over the time span of the study.
- (3) To describe the relationship between the economic incentives of the program and the rate of participation in the program.
- (4) To determine the statistical extent of conversion of Farm Use Assessment land and;
- (5) To describe the change in economic value of converted Farm Use Assessment land.

BACKGROUND - OREGON'S FUA PROGRAM

Oregon's differential assessment program was first enacted in selected areas of the state in 1961 (Polk, Washington Counties) and then as previously mentioned, statewide in 1963. Minor modifications of the law have taken place since that time, reflecting the respective leverage of urban and farm interest.³ While it is not necessary to describe

every facet of the law to understand its intent, the following points should be noted:

- The program created by the law is known as the "Special Farm Use Assessment Program" or the "Farm Deferral Program".
- The law creates two categories within the FUA program, one for zoned land (Exclusive Farm Use Zones or EFU zones) and one for Non-EFU farmland. An EFU zone is an area a county designates where "Land within such zones shall be used exclusively for farm use."⁴ Non-EFU farmland is land which, while not in an EFU zone, is being used for farm use, as defined by the same criteria for what constitutes farm use in an EFU zone with the exception that to qualify for FUA, Non-FUA farmland must pass a "gross income test". This test requires a certain gross income per acre from farmland, the amount varying with the acreage of the farm.⁵
- Farmland which is EFU zoned is assessed at "farm use value", i.e. economic rent obtained as a farm unit, not at "fair market value" which is the value assessment method all of the other land in the county is assessed at. "Farm Use Value" is determined by the county tax assessor using guidelines established by the Oregon Department of Revenue.⁶ Participation in the FUA program is automatic for EFU land, as long as it meets the "farmland" criteria. Non-EFU farmland is also assessed at FUA, but only upon application which must be renewed yearly.
- When land which is zoned EFU is no longer used as a farm unit it is then assessed at its highest and best market value. In addition the owner must pay all taxes previously deferred up to ten years plus interest to the county where the farm is. The method for computing the amount owed is determined by guidelines established by the Department of Revenue. The same applies for unzoned farmland which can no longer meet the definition of farm use, although the method for assessing the interest and back taxes differs somewhat.⁸

METHODOLOGY

The methodology used in this paper involves observing tax lot data for selected areas in Washington County, Oregon and determining from this data participation in the state's Farm Use Assessment Program.⁹ The tax lot data was obtained from the county tax assessor's office in the form of "packets" with each packet corresponding to a specific tax lot or ownership parcel.

Selection of Study Area

To examine the effectiveness of the FUA program it was necessary to choose a study area which was facing development pressures and had agricultural land currently enrolled in the program. A survey of population census data and a county atlas revealed that Washington County met these requirements. Specifically:

- (1) The county has had the greatest rate of population growth and hence development pressure for the past decade than any other county in the state.¹⁰
- (2) Only five percent (22,912 acres) of the land area is currently in urban use, with 45 percent (172,055 acres) devoted to agriculture and 50 percent (220,120 acres) devoted to timber. Of the acreage in agricultural use, 92 percent (157,928 acres) are enrolled in the FUA program as of 1977.¹¹
- (3) Considering the county's proximity to Portland the population and development pressures are predicted to increase in the future, accelerating the conversion of agricultural land to non-agricultural uses. This is supported by the county's Comprehensive Plan.¹²

Due to the immense number of property owners in the county (and their corresponding tax packets) it became apparent that a complete inventory of participation in the FUA program was beyond the scope of this study. Therefore the general study area was further limited and reduced to two township sections. Township sections were chosen because of their ease of location for reference purposes, definitive size for calculations (640 acres) and because tax lot information at the county tax assessor's office is catalogued based on the township and range system. The first of the two sections were chosen using the following criteria:

- I. a. It had to be an area where agriculture was the dominant land use in 1963, the first year of the program. For the purposes of this paper dominant means greater than 50 percent of the land base. Aerial photos for that year were examined to evaluate the amount of land devoted to agriculture.
- b. It had to be a section which currently or during the study period had land that underwent conversion from agricultural to non-agricultural use, preferably near the urban fringe. Conversion was determined by comparing aerial photos for 1963 and 1977 and observing land use changes.

c. It had to be an area containing soils falling within SCS soils classes I-IV. These criteria were included because the FUA program is now linked to Oregon's State-Wide Planning Goal #3. Goal #3 provides for the protection of agricultural land and soils of class I-IV in Western Oregon.

II. The second area was selected also using the above criteria with the exception of the requirement that the area be on the urban fringe. In fact it was preferred that the area be further from the fringe to mitigate development pressures. Thus this area was to act as a control to determine if spatial location had an effect on participation in the program.

*Note - In addition to the above criteria several other factors played a part in selecting the specific study area including:

- (1) The experience, knowledge and advice of the Washington County tax assessor and;
- (2) Manageability of the data; that is, a study area had to be chosen which offered data in sufficient quantities to illustrate the purpose of this paper.

After consideration of the above information two sections were singled out. Based on criteria I, section 36 T 1N R2W (hereafter known as the Tualatin Road section) was selected (see Figure 1). Using criteria II, section T 1S R2W (the Bronson Creek section) was chosen (see Figure 1 for location).

Description of the Township Sections

The Tualatin Road section is located between the city of Beaverton and Hillsboro and is bisected by a main arterial, the Tualatin Highway. The section is approximately 3 miles from Beaverton's Central Business District (CBD) and about 5 miles from Hillsboro's. Currently the land uses in the section are divided almost evenly between an EFU zoned parcel (203 acres), subdivisions built prior to 1963, and all the other land uses such as farming or pasture (see Figure 2). These lands are now zoned RS-1 (single family, 2 acres/lot) and RU-4 (single family, 7000 sq. ft. lot). The Washington County Comprehensive Plan (Revised to February 1977) designates this section as an "Urban Growth Area", meaning:

"The Urban Growth Area is the geographic portion of the county. . . in which at least a minimum level of urban services, including public water and sewer, are available. . . and in which a concerted effort will be made to provide the full range of urban

WASHINGTON COUNTY

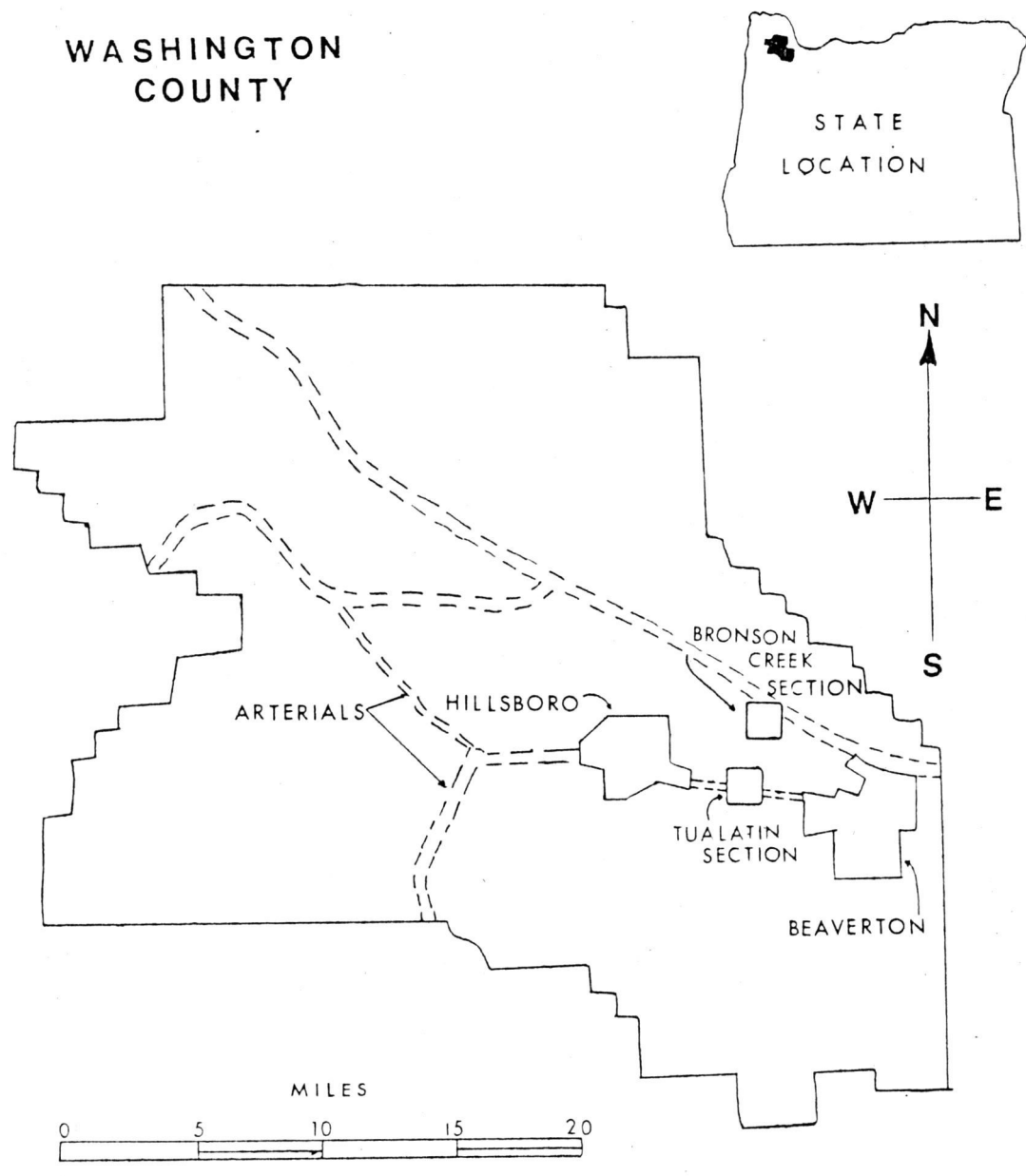


Figure 1.

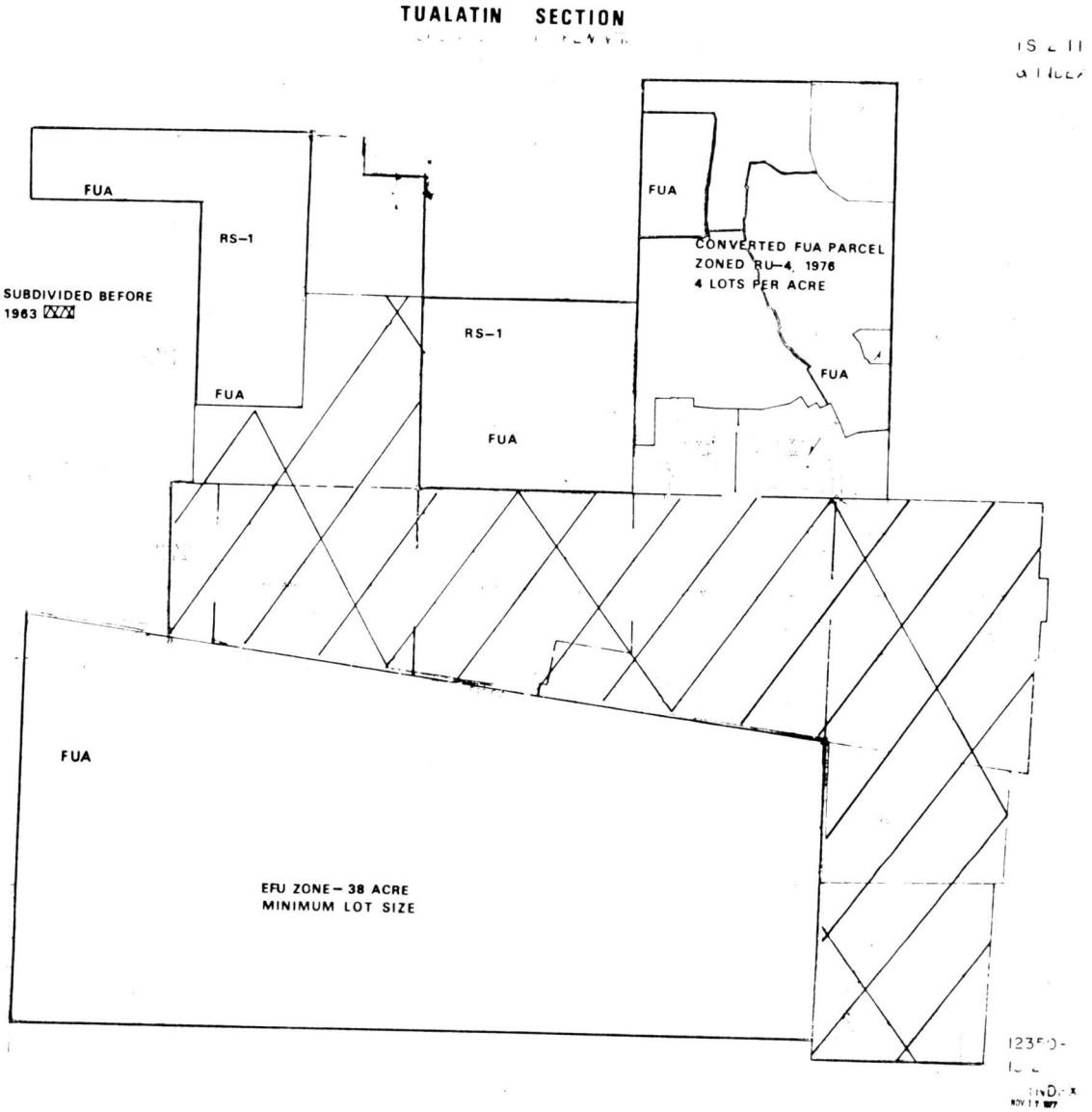


Figure 2.
Tualatin Section Map

services consistent with the County Comprehensive Plan and its Goals and Strategies."¹³

The Bronson Creek section is further from Beaverton's CBD than the Tualatin section, approximately 5 miles. It is also further from Hillsboro's CBD, about 6 miles. The dominant land use in the area is agricultural. The County Comprehensive Plan designates it as an "Intermediate Urban Growth Area", which is:

"The estimated geographic portion of the County which can accommodate urban use over a 20-40 year time frame . . . and within which a full range of urban services will need to be extended . . . at a future point in time consistent with the County Comprehensive Plan. . ."¹⁴

Thus, the county has consigned both sections to eventual urbanization with all accompanying urban services.

Data Collection

Tax packets corresponding to property ownership within both township sections were examined at the Washington County assessor's office (see Appendix 1 for example of assessment form). The data collected were segregated into the three following categories:

FUA - Farm Use Assessment, those ownership parcels which now meet or at one time met the requirements for FUA as specified by ORS 215.203.

NFUA - Non-Farm Use Assessment, those parcels which are not enrolled in the FUA program either because they do not qualify or because of choice.

NA - Non-Assessable land, land which received no value assessment due to public ownership (federal, state, local).

Information gathered from the packets included:

- a. Total number of tax lots in FUA, NFUA or Non-Assessable for each year since the inception of the program in 1963.
- b. Total amount of acreage in all categories for each year of the program.
- c. The assessed value for all FUA, NFUA land for each year of the program to date.

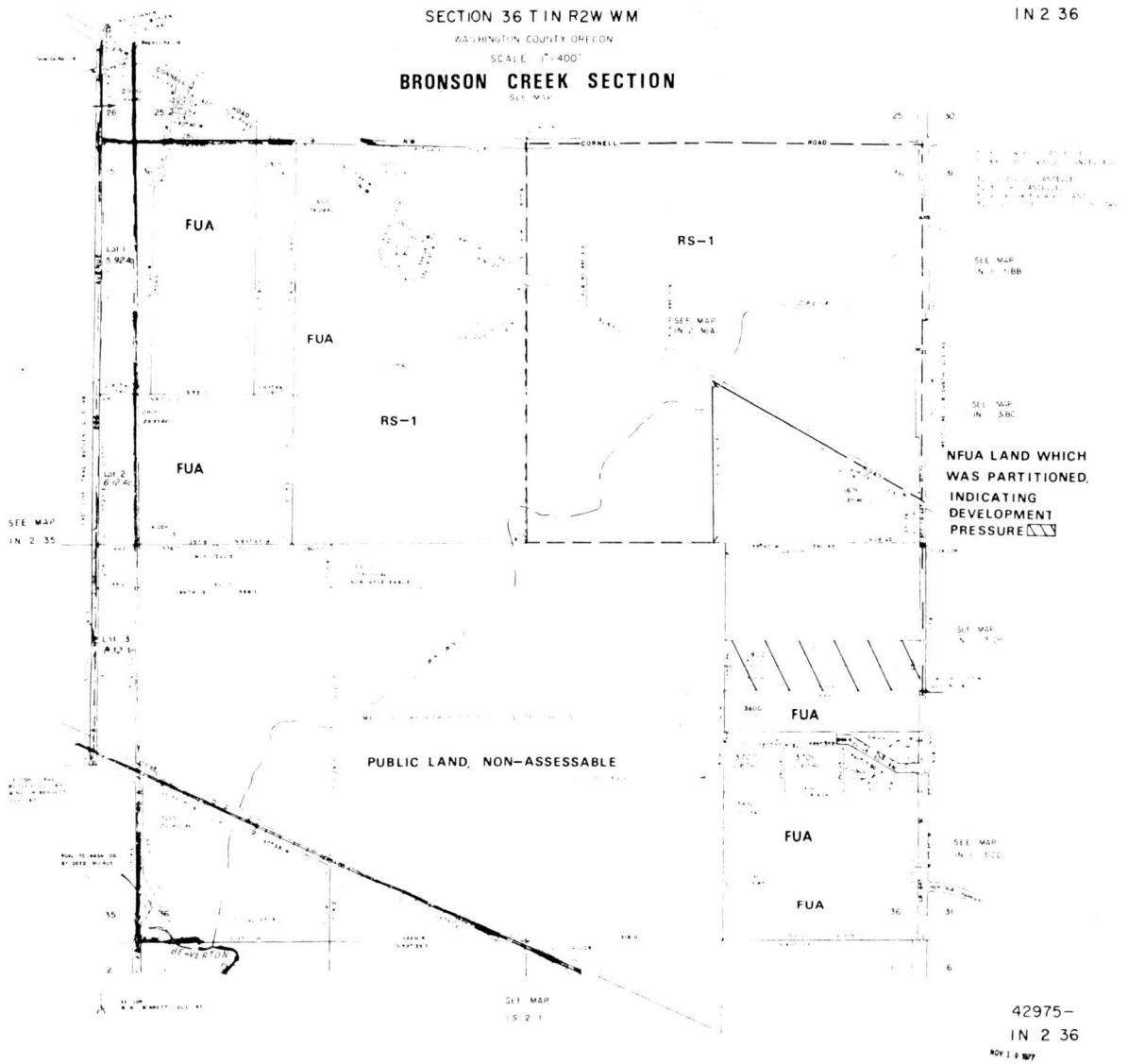


Figure 3.
Bronson Creek Section Map

NE1/4 SECTION 36 TIN R2W WM
WASHINGTON COUNTY OREGON
SCALE 1"=200'
BRONSON CREEK SECTION

IN 2 36A

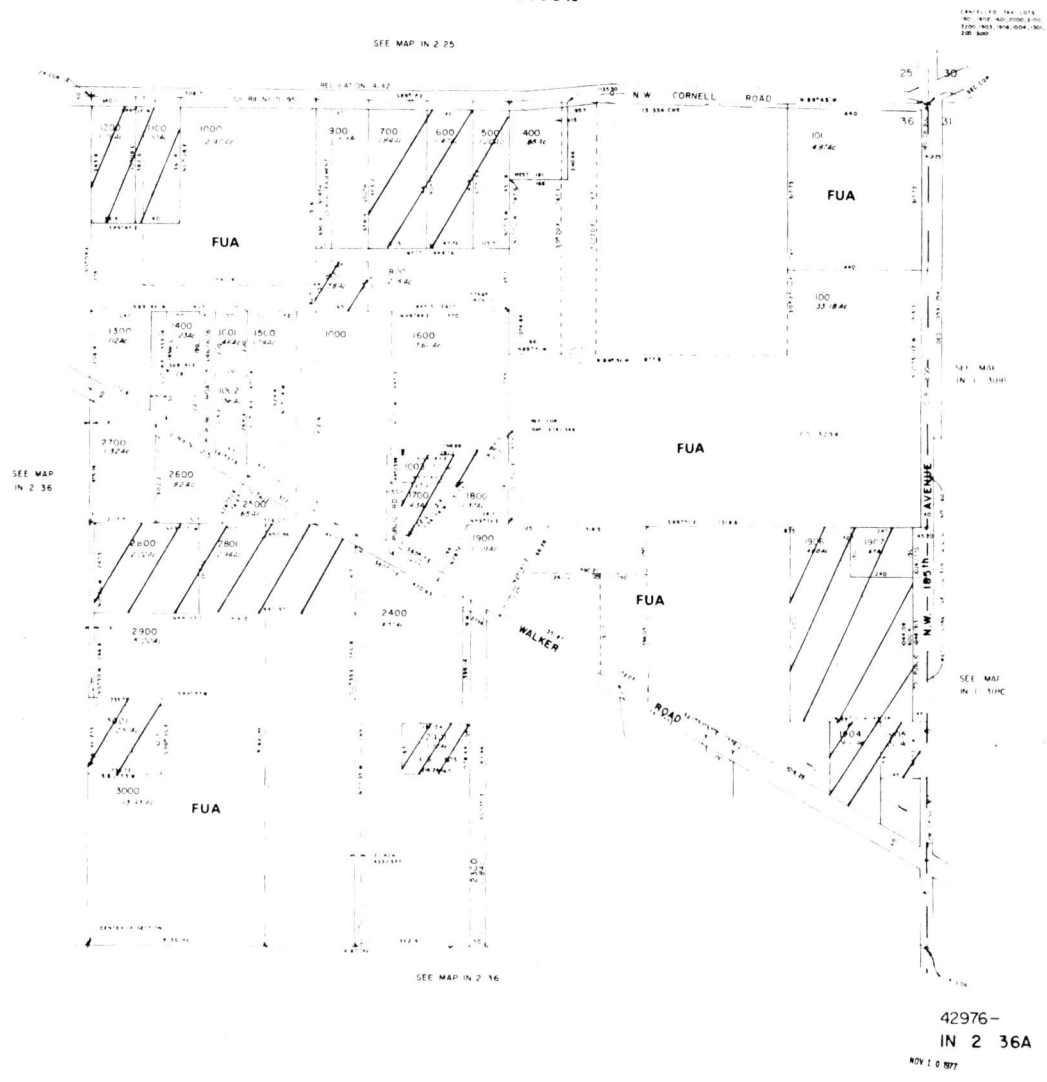


Figure 4.
Bronson Creek 1/4 Section Map

After the data were collected it was further aggregated into columns (see tables 2 and 3) to determine:

- (1) Average assessed value/acre of FUA land.
- (2) Average assessed value/acre of NFUA land.
- (3) Average lot size of FUA land.
- (4) Average lot size of NFUA land.
- (5) Total acreage in each category.
- (6) Percent of the section each category represented.
- (7) Percent of the study area each category represented.

Before proceeding, a few problems encountered in collecting the data need to be explained.

First, note that the chart on the following page has a percent of section column and a percent of "study area" column. The percent of section refers to the entire area of the township section (640 acres). This includes that part of the section devoted to roads, sidewalks, utilities, subdivisions built prior to 1963 and which were not included in this study and all other land uses. The percent of "study area" column refers only to that acreage for which tax information could be gathered; thus the total for each year in this column will never equal 640 acres.

Second, there were problems interpreting the tax forms themselves. Often there were two different values of assessment for a single year due to differing evaluations by assessors. The greater value was used for this study. While the difference between the values was rarely large (i.e. greater than 10%) this factor could throw some problems of bias into the final data interpretation.

Third, there were fluctuations in the total acreage in both study areas. In part this is due to some ownership parcels overlapping into other sections and thus the tax lot information was filed under a different section in the assessor's files and was no longer considered part of the section. Also, resurveying could account for other fluctuations in tax lot boundaries, changing the area slightly.

Fourth, reassessment of land values does not necessarily take place every year and assessment of the county's entire land area never takes place at the same time. Therefore, land values could increase at different

rates for similar pieces of property but not be picked up until as assessment the following year. This will make comparison of land values between the two sections more difficult.

Nevertheless, despite these limitations, this researcher feels the data is useful to illustrate relative activity in the FUA program and can adequately show whether the program is achieving its original goals.

Data Analysis

The data analysis consists primarily of comparing trends in lot sizes for FUA and NFUA land, value/acre for each category, and total participation in the program over time. The data analysis proceeded in the following order:

- (1) Participation in the FUA program.
- (2) Effect of land values on participation in the FUA program.
- (3) Trends in average lot size for FUA, NFUA land.
- (4) Net gain/loss in FUA land in both sections.
- (5) Conversion of FUA land.

STUDY FINDINGS

Participation in the FUA Program

In the Tualatin section there were only 2 tax lots totaling 132 acres enrolled in the FUA program in 1963 (see Table 1). However, by 1977 the number of tax lots increased to 7 with a total of 386 acres. Nevertheless this was not the largest amount of acreage in the program for the study period. In 1974 and 1975 there was a peak total of 450 acres enrolled. This fluctuation was primarily due to a large (102 acre) land parcel which joined the FUA program and subsequently dropped out. Closer investigation of the tax lot data reveals that this parcel (tax lot 100) was partitioned (divided into more than two pieces) twice, in 1976 when 28 acres were partitioned and later that same year when another 44 acres were partitioned. This change in land use will be expounded upon further in the "Conversion" section of this paper.

In the Bronson Creek area the same general participation trend in FUA appeared. In 1963 there was 1 tax lot of 54 acres enrolled in the

Table 1

 PARTICIPATION IN FUA 1963-1977

<u>Year</u>	<u>TUALATIN SECTION</u>		<u>BRONSON CREEK SECTION</u>	
	<u>Tax Lots</u>	<u>Acreage</u>	<u>Tax Lots</u>	<u>Acreage</u>
1963	2	132	1	54.28
1964	2	132	2	69.2
1965	5	407	9	160
1966	5	407	10	188
1967	4	305	6	132
1968	4	305	8	163
1969	4	305	13	207
1970	4	305	14	220
1971	5	334	14	220
1972	5	334	16	236
1973	6	450	16	236
1974	6	451	17	237
1975	6	451	17	237
1976	6	421	17	237
1977	6	377	17	237

Table 2

TUALATIN SECTION--AGGREGATE DATA							
YEAR	CATEGORY	# of TAX LOTS	ACRES	% of SECTION	% of STUDY AREA	AVERAGE LOT SIZE	VALUE/ ACRE
1963	FUA	2	132	20.5%	29%	65.8	\$245.00
	NFUA	8	323	50.4%	71%	40.3	\$386.00
	TOTALS	10	454	71%	100%		
1964	FUA	2	132	20.6%	29%	66.0	\$395.00
	NFUA	8	323	50.4%	71%	40.0	\$472.00
	TOTALS	10	455	71%	100%		
1965	FUA	5	407	63.5%	89%	82.0	\$383.00
	NFUA	6	47	7.3%	10%	8.0	\$1258.00
	TOTALS	11	454	71%	99%		
1966	FUA	5	407	63.5%	90%	82.0	\$383.00
	NFUA	6	47	7.3%	10%	8.0	\$1225.00
	TOTALS	11	454	71%	100%		
1967	FUA	4	305	48%	67%	76.0	\$380.00
	NFUA	9	149	23.2%	33%	17.0	\$1234.00
	TOTALS	13	454	71%	100%		
1968	FUA	4	305	48%	67%	76.0	\$291.00
	NFUA	9	149	23%	33%	7.0	\$1236.00
	TOTALS	13	454	71%	100%		
1969	FUA	4	305	48%	67%	76.0	\$290.00
	NFUA	9	149	23%	33%	17.0	\$1369.00
	TOTALS	13	454	71%	100%		
1970	FUA	4	305	48%	67%	76.0	\$247.00
	NFUA	9	149	23%	33%	17.0	\$1500.00
	TOTALS	13	454	71%	100%		

Table 2. Continued.

<u>YEAR</u>	<u>CATEGORY</u>	<u># of TAX LOTS</u>	<u>ACRES</u>	<u>% of SECTION</u>	<u>% of STUDY AREA</u>	<u>AVERAGE LOT SIZE</u>	<u>VALUE/ ACRE</u>
1971	FUA	5	334	52%	74%	67.0	\$255.00
	NFUA	8	120	18%	26%	15.0	\$1608.00
	<u>TOTALS</u>	<u>13</u>	<u>454</u>	<u>70%</u>	<u>100%</u>		
1972	FUA	5	334	52%	74%	67.0	\$255.00
	NFUA	8	120	19%	26%	15.0	\$2413.00
	<u>TOTALS</u>	<u>13</u>	<u>454</u>	<u>71%</u>	<u>100%</u>		
1973	FUA	6	450	70%	96%	75.0	\$305.00
	NFUA	7	18	3%	4%	2.5	\$2502.00
	<u>TOTALS</u>	<u>13</u>	<u>468</u>	<u>73%</u>	<u>100%</u>		
1974	FUA	6	451	70%	96%	75.0	\$418.00
	NFUA	7	18	3%	4%	2.5	\$2677.00
	<u>TOTALS</u>	<u>13</u>	<u>469</u>	<u>73%</u>	<u>100%</u>		
1975	FUA	6	450	70%	96%	75.0	\$501.00
	NFUA	8	18	3%	4%	2.2	\$3032.00
	<u>TOTALS</u>	<u>14</u>	<u>468</u>	<u>73%</u>	<u>100%</u>		
1976	FUA	7	386	60%	83%	55.0	\$695.00
	NFUA	123	81	12%	17%	.44	\$13,830.00
	<u>TOTALS</u>	<u>130</u>	<u>467</u>	<u>72%</u>	<u>100%</u>		
1977	FUA	7	386	60%	83%	55.0	\$695.00
	NFUA	116	81	12%	17%	.44	\$13,953.00
	<u>TOTALS</u>	<u>123</u>	<u>467</u>	<u>72%</u>	<u>100%</u>		

Table 3

BRONSON CREEK SECTION--AGGREGATE DATA							
YEAR	CATEGORY	# of TAX LOTS	ACRES	% of SECTION	% of STUDY AREA	AVERAGE LOT SIZE	VALUE/ ACRE
1963	FUA	1	54	8.4%	16.7%		\$379.00
	NFUA	34	270	42.0%	83.0%	7.9	\$686.00
	NA		236	37.0%			
	TOTALS	35	560	87.0%	100%		
1964	FUA	2	69	10.7%	21.0%	34.6	\$416.00
	NFUA	33	252	39.3%	78.5%	7.6	\$722.00
	NA		236	37.0%			
	TOTALS						
1965	FUA	9	160	25.0%	49.0%	17.7	\$464.00
	NFUA	28	161	25.0%	49.0%	5.8	\$897.00
	NA		236	37.0%			
	TOTALS	37	557	87%	100%		
1966	FUA	10	188	29.0%	59.0%	18.8	\$428.00
	NFUA	28	133	21.0%	41.0%	4.8	\$978.00
	NA		236	37.0%			
	TOTALS	38	557	87%	100%		
1967	FUA	6	132	21%	41.0%	22.1	\$382.00
	NFUA	33	189	29%	59.0%	5.7	\$1105.00
	NA		236	37%			
	TOTALS	39	557	87%	100%		
1968	FUA	8	163	25%	49.0%	20.4	\$322.00
	NFUA	34	165	26%	50.3%	4.8	\$1508.00
	NA		236	37%			
	TOTALS	42	564	88%	100%		
1969	FUA	13	207	32%	60.0%	15.9	\$350.00
	NFUA	36	136	21%	39.6%	3.7	\$1825.00
	NA		236	37%			
	TOTALS	49	579	90%	100%		

Table 3. Continued.

<u>YEAR</u>	<u>CATEGORY</u>	<u># of TAX LOTS</u>	<u>ACRES</u>	<u>% of SECTION</u>	<u>% of STUDY AREA</u>	<u>AVERAGE LOT SIZE</u>	<u>VALUE/ ACRE</u>
1970	FUA	14	220	34%	64%	16.0	\$327.00
	NFUA	35	122	19%	36%	4.0	\$2118.00
	NA		236	37%			
	<u>TOTALS</u>	<u>49</u>	<u>578</u>	<u>90%</u>	<u>100%</u>		
1971	FUA	14	221	35%	64%	16.0	\$302.00
	NFUA	36	122	19%	36%	3.0	\$1807.00
	NA		236	37%			
	<u>TOTALS</u>	<u>50</u>	<u>579</u>	<u>90%</u>	<u>100%</u>		
1972	FUA	16	236	37%	69%	15.0	\$340.00
	NFUA	37	112	18%	32%	3.0	\$2318.00
	NA		236	37%			
	<u>TOTALS</u>	<u>50</u>	<u>577</u>	<u>90%</u>	<u>100%</u>		
1973	FUA	16	237	37%	68%	15.0	\$395.00
	NFUA	37	112	18%	32%	3.0	\$2906.00
	NA		236	37%			
	<u>TOTALS</u>	<u>53</u>	<u>585</u>	<u>91%</u>	<u>100%</u>		
1974	FUA	17	237	37%	68%	14.0	\$490.00
	NFUA	37	111	17%	32%	3.0	\$3292.00
	NA		235	37%			
	<u>TOTALS</u>	<u>54</u>	<u>584</u>	<u>91%</u>	<u>100%</u>		
1975	FUA	17	237	37%	69%	14.0	\$562.00
	NFUA	37	107	17%	31%	3.0	\$4066.00
	NA		236	37%			
	<u>TOTALS</u>	<u>54</u>	<u>585</u>	<u>91%</u>	<u>100%</u>		
1976	FUA	17	237	37%	41%	14.0	\$573.00
	NFUA	38	110	17%	19%	2.8	\$4658.00
	NA		236	37%	40%		
	<u>TOTALS</u>	<u>55</u>	<u>583</u>	<u>91%</u>	<u>100%</u>		
1977	FUA	17	237	34%	62%	14.0	\$580.00
	NFUA	40	132	21%	38%	2.8	\$5482.00
	NA		236	37%			
	<u>TOTALS</u>	<u>57</u>	<u>586</u>	<u>92%</u>	<u>100%</u>		

program, and by 1977 there were 17 tax lots totaling 237 acres in FUA.

Comparing the two areas we see that for each year of the study participation in the FUA program was greater in the Tualatin section than in the Bronson Creek section. This is so both in percentages (to compensate for bias in evaluating two different size sections) and in absolute acreage. In 1977 the Tualatin's FUA acreage amounted to 83 percent (386 acres) of the study area vs. 62 percent (237 acres) for the Bronson Creek section. This more rapid response to the incentives of the program by the landowners in the Tualatin section appears to be related to rising assessed values of NFUA land as illustrated in the following section.

Effects of NFUA Land Values on Participation in FUA

In both sections the average assessed value/acre of NFUA land increased at a greater rate than the average assessed value of FUA land (see Tables 4 and 5 on following pages). This difference in land values appears to have been significant in its effect on the amount of farmland enrolled in the FUA program (see Figure 5). For instance, in 1963 in the Tualatin section the average assessed value/acre of NFUA land was \$386.00 compared to an assessed value/acre of \$245.00 for FUA land--a difference of \$141.00. For the owner of a 100 acre farm this would mean an additional \$324.00 in taxes for the entire year (100 acres x \$23.00, the tax rate per thousand of assessed value x \$141.00).¹⁵ Since perception of benefits and cost of the program will vary from landowner to landowner it is hard to judge if this was enough savings to encourage farmers to enroll in the program. However, an examination of Table 1 and Figure 5 shows that for 1963 there were only 2 tax lots of 132 acres taking advantage of the tax break. By 1965 this situation changed. In that year there were 5 tax lots with 407 acres enrolled in FUA when the difference between FUA and NFUA land was \$875.00/acre. For the owner of that same 100 acre farm this would mean an additional \$2000.00 in property taxes if the land were not in the program.

Closer examination of Table 2 and Figure 4 also shows that from 1967-1972 a drop in FUA occurred. This was due to the withdrawal of tax lot

Table 4

 ASSESSED VALUE/ACRE FUA - NFUA LAND 1963-1977 TUALATIN SECTION

<u>YEAR</u>	<u>FUA</u>	<u>NFUA</u>	<u>DIFFERENCE</u>
1963	\$245.00	\$386.00	\$141.00
1964	\$395.00	\$472.00	\$77.00
1965	\$383.00	\$875.00	\$875.00
1966	\$383.00	\$1225.00	\$842.00
1967	\$383.00	\$1234.00	\$854.00
1968	\$380.00	\$1236.00	\$945.00
1969	\$290.00	\$1369.00	\$1079.00
1970	\$247.00	\$1500.00	\$1253.00
1971	\$255.00	\$1608.00	\$1353.00
1972	\$255.00	\$2413.00	\$2158.00
1973	\$305.00	\$2502.00	\$2197.00
1974	\$418.00	\$2677.00	\$2259.00
1975	\$501.00	\$3032.00	\$2531.00
1976	\$695.00	\$13830.00	\$13135.00
1977	\$695.00	\$13953.00	\$13258.00

Table 5

ASSESSED VALUE/ACRE FUA - NFUA LAND 1963-1977 BRONSON CREEK SECTION

<u>YEAR</u>	<u>FUA</u>	<u>NFUA</u>	<u>DIFFERENCE</u>
1963	\$379.00	\$686.00	\$308.00
1964	\$416.00	\$722.00	\$306.00
1965	\$464.00	\$897.00	\$433.00
1966	\$428.00	\$978.00	\$550.00
1967	\$382.00	\$1105.00	\$723.00
1968	\$322.00	\$1508.00	\$1186.00
1969	\$350.00	\$1825.00	\$1475.00
1970	\$327.00	\$2118.00	\$1791.00
1971	\$302.00	\$1807.00	\$1505.00
1972	\$340.00	\$2318.00	\$1978.00
1973	\$395.00	\$2906.00	\$2511.00
1974	\$490.00	\$3292.00	\$2802.00
1975	\$562.00	\$4066.00	\$3504.00
1976	\$573.00	\$4658.00	\$4085.00
1977	\$580.00	\$5482.00	\$4902.00

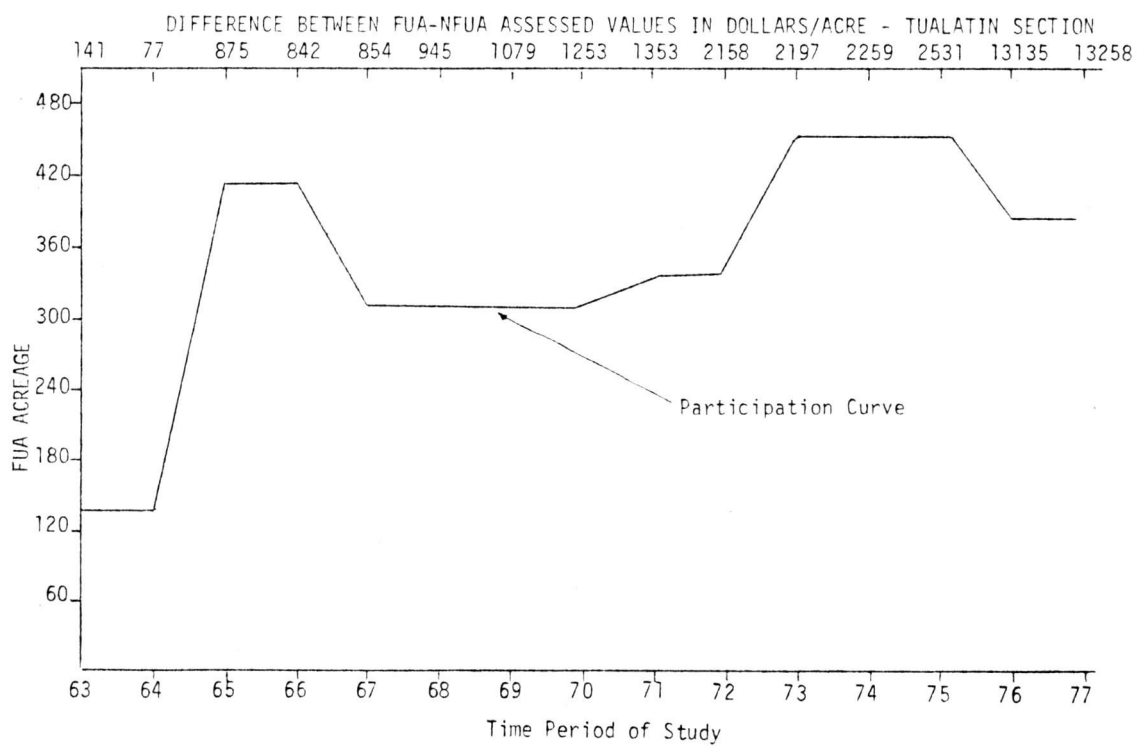
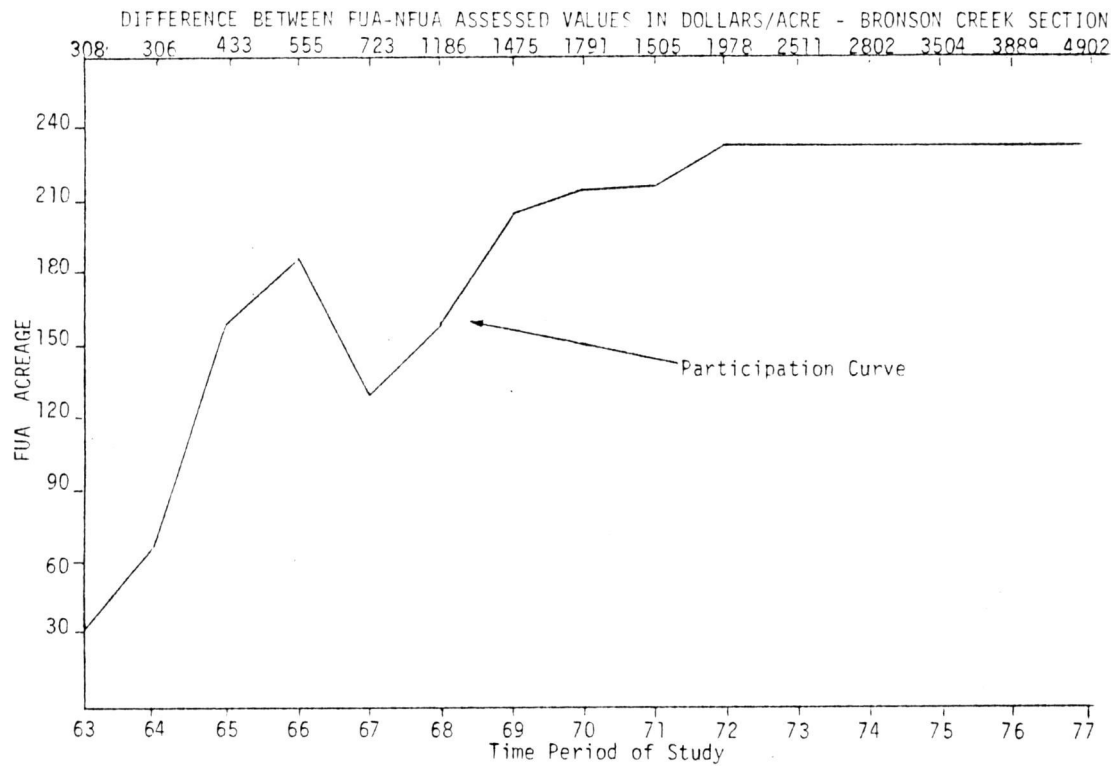


Figure 5.
Participation in FUA

100 (102 acres) from the program (in 1971 a tax lot of 29 acres joined the program, raising to 334 the amount of land enrolled). This land stayed out of the program until 1973 when it was reentered. An interview with the Washington County tax assessor revealed that the owners of this parcel withdrew the land with the intent of selling to a developer. Apparently the deal dragged on for several years and finally fell through so the land was put back in the program. In 1976 the land was finally sold to a developer and subsequent to that time 73 acres have been partitioned with the remaining acreage in FUA.

A similar relationship also emerged in the Bronson Creek section. While the rise in land values and the differences between the FUA and NFUA were not as great as in the Tualatin area, a steady trend of increasing participation can be observed.

In 1963 the difference between FUA and NFUA was \$308.00 (see Figure 5). Only 54 acres were enrolled in the program at that time. In 1965 when this difference was \$433.00 participation in the program rose to 160 acres and increased steadily to its present total of 237 acres in 1977 when the difference was \$4902.00. There was one major fluctuation in this time period (in 1967) when the acreage in FUA dropped. This was due primarily to a change in the FUA program which required a yearly contract to be eligible for the program. According to the tax assessor many landowners were unaware of the sign-up requirement and as a result failed to make the application deadline.

Average Lot Sizes--FUA, NFUA Land

The average lot size for NFUA land parcels decreased in both sections over the time frame of the study (see Table 6). This reduction in size seems related to increasing assessed values of the acreage. As development pressures, i.e. price of land increased, more NFUA lots were divided into smaller parcels. In the Bronson Creek section this trend is most apparent. In 1963 there were 34 tax lots averaging 7.9 acres classified as NFUA. By 1977 this increased to 40 lots averaging 2.8 acres each. During this same period the value/acre of the NFUA land went from \$686.00 to \$5482.00. This represents "opportunity cost" or profit for a landowner with surplus acreage. Indeed, partitioning is what happened as the example from the tax data shows:

<u>Original Tax Lot #</u>	<u>Acreage/Value 1963</u>	<u>New Tax Lot #</u>	<u>Acreage/Value 1977</u>
3000	13.93/\$2200	3001	1.25/\$7000
1900	15.79/\$20300	1904	.99/\$5700
		1905	.50/\$5900
		1906	4.6/\$35900

*See Figures 3 and 4.

Thus, development pressures were felt first in the NFUA land.

This trend towards smaller lot sizes also appeared in FUA land. In 1964 the average lot size in the Bronson section was 34.6 acres; by 1977 this had dropped to 14. However, an examination of the tax data shows that this was due to smaller FUA parcels entering the program, not partitioning.

The average lot size of NFUA land in the Tualatin section also declined. In 1963 the average lot size was 40.3 acres; by 1977 this declined to .44. However, most of this decline occurred in the last two years of the study when one FUA lot of 102 acres was partitioned, adding 109 .18 acre lots to the NFUA category. This addition to NFUA lowered the average lot size for NFUA land from 2.2 acres in 1975 to .44 acres in 1976. As such, these trends are useful as an indicator of development pressures. This can be seen by observing that in 1975 there were 450 acres in FUA, 18 acres in NFUA. Since this was virtually all of the useable land in the section and since the lot size for the remaining NFUA land was so small that it precluded any more partitioning, the only other available land for conversion was FUA land.

The average lot size for FUA land in the Tualatin section remained relatively stable throughout the study period. In 1963 the average size was 65.8 acres, in 1977, 63 acres. Fluctuations in size did occur (in 1966 the average size was 82 acres), but this was primarily due to Tax Lot 100 (102 acres) withdrawing and then reentering the program.

Net Gain of FUA Land

There was a net gain of FUA land in both sections over the time period of the study. The net gain was calculated by subtracting the amount of acres enrolled under the program in 1963 from that amount in 1977. For the Tualatin section this came to 246 acres, for the Bronson Creek section this came to 237 acres.

Table 6

AVERAGE LOT SIZE
FUA AND NFUA

<u>YEAR</u>	<u>FUA</u>		<u>NFUA</u>	
	<u>TUALATIN</u>	<u>BRONSON CREEK</u>	<u>TUALATIN</u>	<u>BRONSON CREEK</u>
1963	65.8	54.28	40.3	7.9
1964	66.0	34.6	40.0	7.6
1965	82.0	17.7	8.0	5.8
1966	82.0	18.8	8.0	4.8
1967	76.0	22.02	7.0	5.7
1968	76.0	20.4	7.0	4.8
1969	76.0	15.9	17.0	3.7
1970	76.0	16.0	17.0	4.0
1971	67.0	16.0	15.0	3.0
1972	67.0	15.0	15.0	3.0
1973	75.0	15.0	2.5	3.0
1974	75.0	14.0	2.5	3.0
1975	75.0	14.0	2.2	3.0
1976	70.0	14.0	.44	2.8
1977	63.0	14.0	.44	2.8

A gain in the use of FUA is not surprising considering the tax benefits under the program. According to the State Department of Revenue, 92% of all land now available for FUA in Washington County is enrolled in the program.¹⁶

Conversion of FUA Acreage to Non-Agricultural Uses

Conversion of FUA land to non-agricultural uses occurred almost exclusively in the Tualatin section and in tax lot 100, as mentioned previously. In 1976 the entire parcel (102 acres) was sold to a Forest Grove development corporation, "Merrill, Gordon and Brabham." The owners of the property were paid \$250,000.00. In the contract the developer agreed to pay all past deferred taxes and interest as required by the FUA law. Thus, the cost of converting the land to non-farm uses (in this instance a subdivision) was shifted to the development firm. To accompany the sale the firm also applied for a zoning change and received it. The zoning was changed from RS-1 single family residential (40,000 sq. ft. lots) to RU-4, single family residential (7,000 sq. ft. lots). Although this zoning change took place, the firm decided to develop only a portion of the section at a time, keeping the remainder in FUA until needed. Thus, even though the parcel is slated for development, the owners can still qualify for the tax benefits offered by the program.

The original tax lot was broken into seven separate parcels, numbered 100, 106, 107, 108, and 1 S 2 11AB, 1 S 2 11AA, 1 S 2 2DD. To date the status of the parcels are as shown below:

<u>Tax Lot #</u>	<u>Present Use/Value</u>	<u>Acreage</u>	<u>Conversion Liability</u>
100	FUA/\$13,400	29.18	None
106	NFUA/\$86,000	22.13	\$5988
107	NFUA/\$50,500	13.05	\$3498
108	FUA/\$4,400	9.57	None
1S211AB	Improved Lots		\$1522.86
1S211AA	Total Value	28.07	\$3460.00
1S2 2DD	\$923,000		\$3250.00
<hr/>			
Totals	\$1,077,300.00	102	\$17,718.00/or 1.8% of total expenditures

*See Figure 2.

In the second column under "Improved Lot Value" we see a figure of \$923,000. This includes the cost of buying the land, partitioning, and lot improvements such as streets, sidewalks, sewers and other utilities. Thus, of a total outlay of \$1,077,300.00 the developer was required to devote \$17,718.00 or 1.8% towards meeting conversion cost associated with the FUA program.

SUMMARY AND CONCLUSIONS

Enrollment in Oregon's FUA program increased in both study sections as the gap between farm use value and market value grew greater. Once enrolled in the program ownership parcels tended to remain in. They were removed only on the expectation of development or when development actually took place.

Location as a factor in enrollment in FUA did not appear to be significant. Both sections showed about the same rate of use of FUA, independent of distance from Beaverton's or Hillsboro's CBD.

In both sections the number of tax parcels in NFUA and FUA increased, while the actual size of the parcels decreased. For NFUA land this can be attributed to rising values of land, allowing subdividing of surplus acreage for profit. For FUA land this was due to smaller parcels entering the program as the tax advantages became larger. Additionally, when a large parcel of FUA land left the program (as in the Tualatin section) this tended to lower the average lot size of remaining FUA land.

While the tax advantages offered by FUA were a factor in enrollment in the program, the economic benefits which accrued to the landowner who sold his property far outweighed these incentives. In the example highlighted in this paper the developer even assumed responsibility for back taxes and interest, freeing the original owners of any liability.

FOOTNOTES

1. Henke, Joseph T. "Preferential Property Tax Treatment for Farmland", Oregon Law Review, Vol. 53, no. 2, Dec. 1974, p. 118.
2. Council on Environmental Quality, "Untaxing Open Space", 1976, Washington D.C.: Government Printing Office, 1976, p. 202.
3. Ibid, no. 2, p. 203.
4. ORS 215.203
5. Farmland outside of EFU zones is not eligible for tax deferral unless in three out of the five years preceding the assessment date the farmland was operated as part of a farm unit and generated a gross income computed in the following manner: (1) If a farm unit consists of less than five acres, the gross income amount generated must be at least \$500.00. (2) If a farm is between five and twenty acres the gross income required must be at least equal to the product of \$100.00 times the number of acres on the farm. (3) If a farm is greater than 20 acres the gross income required is \$2000.00.
6. ORS 308.345. According to the Department of Revenue there is one method currently used to assess the farm use value of agricultural land. It is called the income test method whereby valuation is based on earning power of the farm.
7. ORS 308.397
8. ORS 308.399
9. A similar study was done by a University of Oregon workshop/class. Blevins, Cathe.; Faith, Dick.; Johnson, Mary A.; Spencer, David.; and Yamashita, David, Agricultural Land Preservation Policies in Oregon.
10. Extension Service Publication, "Resource Atlas of Washington County, Oregon," p. 9, March 1974, Extension Business Office, Extension Hall, Oregon State University, Corvallis, Oregon.
11. "Summary of Assessment Rolls for 1977 - Real Property (Locally Assessed). Department of Revenue, Salem, Oregon.
12. Comprehensive Framework Plan, Washington County, Oregon. February 1977.
13. Ibid, no. 12, p. 27.
14. Ibid, no. 12, p. 35.

15. The tax rate used in this calculation is the one currently used in the county. The actual rate at the time of the example could not be obtained, therefore this figure is for comparison only.
16. Telephone interview, January 14, 1977.

1575

1S2 11
100

(29-18)
29-24

72350 - 0100	
Account Number	300925
Year Appraised	
Property Class	
Factor Book	
Year Built	
% Good	
Land Area	
Timber	
Imp	
Maint	
Value	

D. R. Form PT. C. B. (Rev. 9-69)

VALUATION SUMMARY OF REAL PROPERTY

5-0-3-1

Assessment Year	Total Acres	Assessed Values				Appraisal Initial or No.
		Land	Timber	Improvements	Total	
73						450-
73	102.64	28,700		8,000	36,700	6531
74	102.64	45,200	REAPPRAISAL	8300	53,500	4390
75	102.64	45,200		8700	53,900	T
75	102.64	53,100		8700	61,800	4500
76	102.64	53,100		9500	62,600	T
77	101.54	52,500	71st	9500	62,000	2-4-76
76	82.23	38,100		-0-	38,100	5-4-76
77	73.93	34,100		-0-	34,100	8-2-76
78	51.80	24,100		-0-	24,100	9-2-76
77	38.75	17,900		-0-	17,900	1-9-77
78	29.18	13,400		-0-	13,400	1-9-77
78	29.18	13,400		-0-	13,400	1-9-77

* Use this space for specially assessed unzoned farmland only.

BIBLIOGRAPHY

- Barron, James. "Impact of Open-Space Taxation in Washington," Wash. Expt. Sta. Bull. 772, March 1973.
- Clawson, Marion. "Land for the Future." Baltimore: John Hopkins Press for Resources for the Future, 1971.
- Clawson, Marion. "America's Land and Its Uses." Baltimore: John Hopkins Press for Resources for the Future, 1971.
- Clawson, Marion. "Suburban Land Conversion in the United States; An Economic and Governmental Process. Baltimore: John Hopkins Press for Resources for the Future, 1971.
- Clawson, Marion. "Urban Sprawl and Speculation in Suburban Land," Land Economics, Vol. 38, May 1962.
- Council on Environmental Quality, "Untaxing Open Space," Washington D.C.: U. S. Govt. Printing Office, April 1976.
- Delatons, John. "Land Use Controls in the United States, 2nd ed. Cambridge: MIT Press, 1969.
- Hansen, David E., Schwartz, S. I. "Landowner Behavior at the Rural-Urban Fringe in Response to Preferential Property Taxation," Land Economics, Vol. 51, November 1975.
- Healy, Robert G. "Land Use and the States," Baltimore: John Hopkins Univ. Press for Resources for the Future, 1971.
- Holland, David M. "An Economic Analysis of Washington's Differential Taxation Program," College of Agriculture Research Center, Cir. 578, Wash. State Univ., Dec. 1974.
- Kaiser, Edward J., Ronald W. Massie, Shirley F. Weiss, and John E. Smith. "Predicting the Behavior of Predevelopment Landowners on the Urban Fringe," Jour. of the American Institute of Planners, Vol. 34, Sept. 1968, pp. 328-333.
- Listokin, David, ed. "Land Use Controls: Present Problems and Future Reform." New Brunswick, N.J.: Rutgers Univ. Center for Urban Policy Research, 1974.
- Local Government Relations Division (LGRD), Executive Dept., State of Oregon, and Oregon State Univ. Ext. Serv., "Oregon Land Use Legislation, Vol. I, Analysis," Sept. 1973.
- McBride, George A., and Marion Clawson. "Negotiation and Land Conversion," Jour. of the American Institute of Planners, Vol. 36, Jan. 1970.

Real Estate Research Corporation. The Cost of Sprawl: Environmental and Economic Costs of Alternative Residential Development Patterns at the Urban Fringe. Washington, D.C.: U.S. Govt. Printing Office, April 1974.

Reilly, William K., ed. "The Use of Land: A Citizen's Policy Guide to Urban Growth, a task force report sponsored by the Rockefeller Brothers Fund. New York: Thomas Y. Crowell, 1973.

Schmid, A. Allen. Converting Land from Rural to Urban Uses. Baltimore: John Hopkins Press for Resources for the Future, 1968.

Shomon, Joseph J. "Open Land for Urban America," Baltimore: John Hopkins Press for Resources for the Future, 1971.

Vollman, June. "How to Find Raw Land in the Right Place and How to Make the Best Deal," House and Home, Aug. 1972, pp. 70-73.