

## Chapter 5: Outlook for the Future<sup>1</sup>

### 1. Introduction

This final chapter reports the findings gathered from both the agland owner surveys and the interviews with local ag leaders about the future viability of agriculture in the 15 counties. There is, however, a time sequence problem for which we have a partial solution. Our surveys started in January 2006 and ended by Thanksgiving of 2006. The interviewing was concentrated in 2005 and 2006, with some follow-up field visits and phone calls in 2007. However, during 2008 (through at least mid-November), urban-edge agriculture looked considerably different from 2005 to mid-2007.

In the first place, urban development pressures diminished. In the metro areas where our study counties are located, the median prices for single-family homes declined in 14 cases between the second quarter of 2007 and the second quarter of 2008, averaging 9.9% lower (Table 5.1). The two worst decreases were Ventura County's 29.5% and Palm Beach County's 19.3%. These losses in value followed increases between 2005 and 2006 in 13 of the counties and in nine cases between 2006 and 2007.

County	2005 (in thousands of dollars)	2006 (in thousands of dollars)	2007 (in thousands of dollars)	2nd quarter 2007 (in thousands of dollars)	2nd Quarter 2008 (in thousands of dollars)	Percentage difference between 2007 and 2008 2nd Quarters
King	316.8	361.2	386.9	395.3	380.5	-3.7%
Sonoma	715.7	752.8	805.4	846.8	684.9	-19.1%
Ventura	529.0	584.8	589.2	593.0	417.8	-29.5%
Lancaster	137.2	137.5	137.5	138.0	133.5	-3.3%
Dakota	234.8	232.3	225.2	227.1	210.8	-7.2%
Dane	218.3	223.2	226.5	223.5	227.4	1.7%
DeKalb	264.2	273.5	276.6	283.2	257.6	-9.0%
Madison	152.0	148.1	147.4	153.9	145.7	-5.3%
Carroll	265.3	279.9	286.1	293.7	280.5	-4.5%
Berks	136.6	143.2	154.7	157.8	153.6	-2.7%
Burlington	215.3	230.2	234.9	243.0	235.7	-3.0%
Orange	495.2	539.4	540.3	558.7	498.5	-10.8%
Larimer	247.1	249.5	245.4	255.2	225.2	-11.8%
Fayette	146.9	147.8	147.5	148.3	146.8	-1.0%
Palm Beach	363.9	371.2	365.5	384.4	310.1	-19.3%
Average percentage difference between 2nd quarter of 2007 and 2nd quarter of 2008						-8.2%

Source: National Association of Realtors

<sup>1</sup> The principal author of this chapter is Dick Esseks.

A second major difference consisted of marked changes in the market prices of agricultural commodities that were significant in many of the counties we studied. Between July 2007 and July 2008 the National Agricultural Statistics Service’s price index for feed grains and hay rose by 82 points (Table 5.2). The corresponding increases for food grains (including wheat) was 73 points and for oil-bearing crops (such as soybeans), 118 points. However, by mid-November 2008 prices had dropped. Corn had declined from a high of above \$7.00 per bushel in June to below \$4.00 on November 14th. In the same time period soybeans fell from a high of almost \$16.00 per bushel to below \$9.00, while wheat dropped from above \$9.00 to close to \$7.00 (Minneapolis).<sup>2</sup>

Commodity	July 2007	July 2008	Change (points)
Feed grains and hay	154	236	+82
Food grains	173	246	+73
Commercial vegetables	126	148	+22
Fruits and nuts	146	151	+5
Oil-bearing crops	136	254	+118
Meat animals	120	126	+6
Dairy products	165	149	-16

\*Base period is 1990 to 1992.

Source: USDA, NASS, *Fact Finders for Agriculture: Agricultural Prices*, released July 31, 2008.

There were fluctuations also in the prices charged to farmers for inputs like fuel and fertilizers. The National Agricultural Statistics Service’s “Index of Prices Paid” by farmers rose 29 points between July 2007 and July 2008, while in the same period its “Index of Prices Received” by farmers increased by 22 points.<sup>3</sup> But then oil prices plummeted in the fall of 2008.

### ***Emphasis on Causal Relationships***

Given the depressed markets for housing and the fluctuations in input and ag product prices, we recognize that this chapter’s subject matter—information gathered mostly in 2005–2006 on the future plans of agland owner and farm operators and, also, local agricultural leaders’ predictions about the future—might be significantly different if collected now (the fall of 2008). Our best solution is to emphasize what the 2005–2006 data tell us about the conditions that *shaped* the plans and opinions. Some or many of those causal conditions should persist or return. For example, if concerns about shortages of seasonal labor or conflicts with nonfarm neighbors made a difference in 2005–2006, they could well be causal factors in 2008–2009 and years beyond.

### ***Main Questions***

This chapter addresses five causal-type questions about the future viability of farming in the studied metro-area counties:

1. Why did some surveyed owners expect to develop their farmland in the next 10 years whereas others did not?

<sup>2</sup> Prices for Minneapolis: USDA, Agricultural Marketing Service, “Daily National Grain Market Summary,” [http://www.ams.usda.gov/mnreports/sj\\_gr850.txt](http://www.ams.usda.gov/mnreports/sj_gr850.txt) (accessed November 14, 2008).

<sup>3</sup> USDA, NASS, *Fact Finders for Agriculture: Agricultural Prices*, <http://usda.mannlib.cornell.edu/usda/current/AgriPric/AgriPric-07-31-2008.pdf> (accessed August 7, 2008).

2. Why did some owners expect that their land would have new agricultural investments over the next five years (i.e., by 2011), such as in farm buildings, and some owners did not?
3. Why did some farm operators among the surveyed owners plan to stay farming in the studied counties for at least 10 years and others expected to quit or leave? Our analysis “controls” for the obvious causal factor of age.
4. Why did some surveyed owners and interviewed agricultural leaders have positive expectations about the future of agriculture in the county while many of their peers did not?
5. Why did some ag leaders recommend that hardworking young people with an agricultural background stay in the county to farm, but other leaders urged a different career path?

Among the conditions that we found to be likely causes of the relevant plans and opinions were:

- the subjects’ assessments of the adequacy of inputs of production (e.g., land, labor, water) and of marketing outlets;
- the kinds of agricultural products being raised on the surveyed owners’ farmland;
- whether they had sons, daughters, or grandchildren lined up to be successor farmers;
- their own experiences with, or opinions about, farmer-neighbor conflicts in the county; and
- evaluations (by the survey participants and the interviewees) of the effectiveness of zoning to protect farmland, of purchase of development rights programs, agricultural use-value assessment for property taxes, and right-to-farm laws.

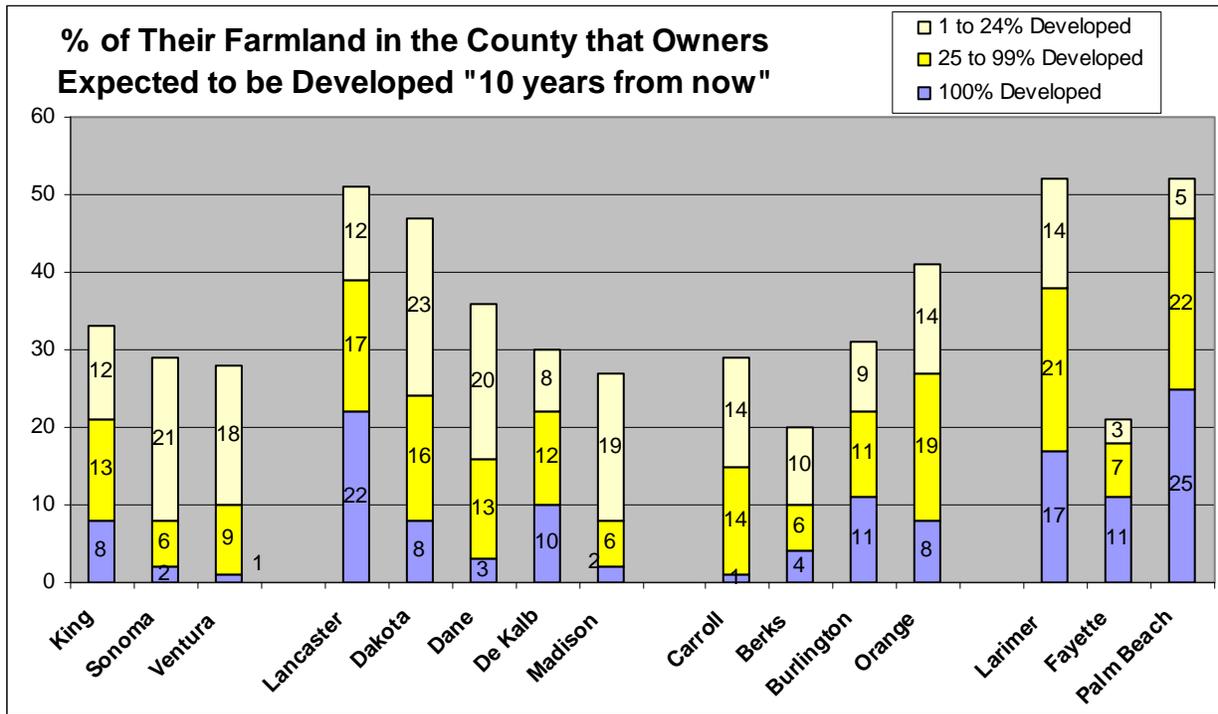
## **2. Surveyed Owners’ Expectations about How Much of Their Farmland Will Be Developed in 10 Years (2016)**

As discussed in Chapter 1, our justification for focusing the survey on farmland owners (rather than on harder-to-sample farm operators) was that owners can make critical decisions for the continued viability of agriculture in their counties—including whether to invest in its ongoing productivity for farming or to develop part or all of it for nonagricultural purposes. Early in the questionnaire we asked, “Given all the agricultural land you own in [that particular] County, about how much of it (if any) do you expect to be in some developed use (residential, commercial, industrial) 10 years from now?”

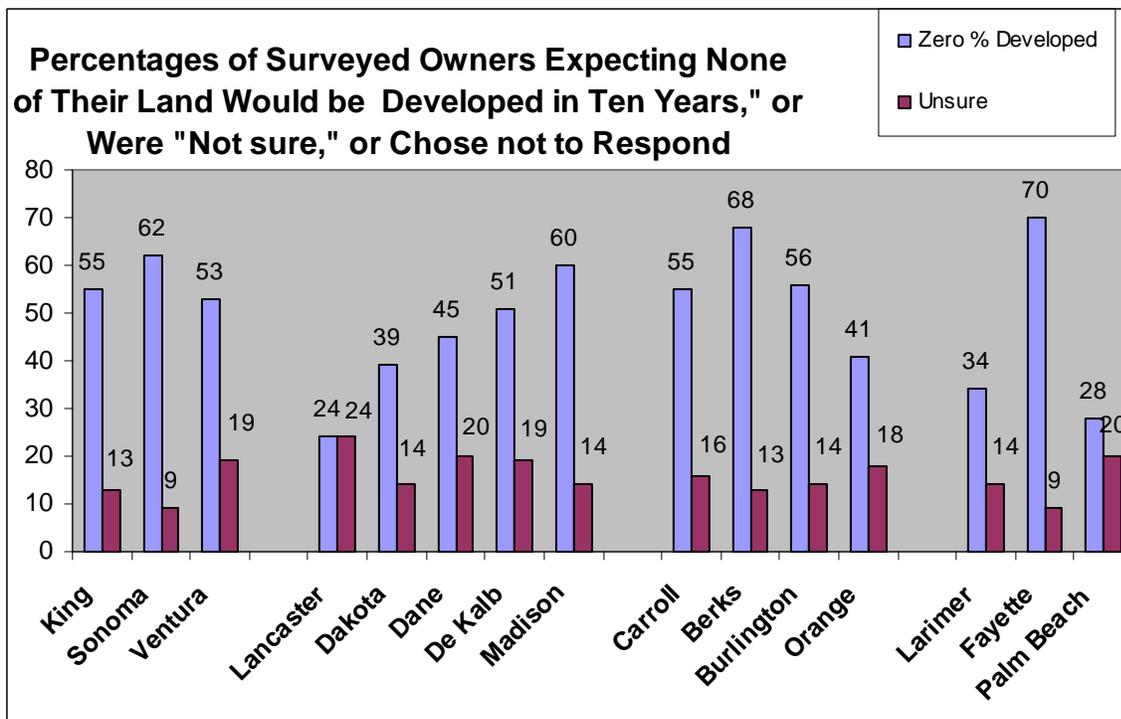
Figures 5.1 and 5.2 display the answers to that question. Across the 15 counties the percentage of owners anticipating *all of their land* to be developed varied considerably—from only 1% in Ventura and Carroll counties to 25% in Palm Beach County. Toward the other end of the spectrum of owners with development plans were those expecting to convert only 1% to 24% of their holdings in the county. This group ranged from 3% of the total respondents in Fayette County to 21% in Sonoma County (Figure 5.1).

In Figure 5.2 the largest group of respondents in each county—24% (in Lancaster and Dakota) to 70% (Fayette)—expected *no part* of their farmland to be developed. Complicating the picture, however, were the nontrivial percentages of owners—from 9% in Ventura and Fayette to as many as 24% in Lancaster who were unsure or unresponsive about what they intended to do with the land (Figure 5.2).

**Figure 5.1**



**Figure 5.2**



We were tempted to explain the differences by county among the “no-development-planned” cases in Figure 5.2 by what we learned about the strictness of zoning from the interviews. Ag leaders consulted in Sonoma, Ventura, Dakota, DeKalb, Madison, and Fayette counties reported that their counties’ zoning tended to protect agricultural land from development. And five of those six counties registered among the highest percentages of surveyed owners expecting “zero development”—from 51% of the sample in DeKalb to 70% in Fayette (Figure 5.2). Dakota County’s 39% value, however, is not particularly impressive, while Burlington County’s 56% zero-development percentage is, even though our interviewees there reported both strong and weak zoning policies, depending on the township government. Therefore, we used regression analysis to look for conditions in addition to zoning that may have shaped owners’ plans for development.

### ***Regression Findings***

Table 5.3 lists the traits of the surveyed owners that emerged from the statistical analysis as likely causal conditions in at least two counties and that were consistent in their causal “direction” (either consistently related to a higher likelihood of no development expectations or consistently linked to a lower probability).<sup>4</sup> Also included were single-county entries if the predictor was the *opposite* of another statistically significant variable and had the opposite kind of impact (e.g., reducing the likelihood of development). For example, the analyses for three counties (DeKalb, Madison, and Sonoma) showed that respondents were *more* likely to develop their land if they believed their local governments tended to “side with the non-farmers” in conflicts between the latter and farmers. Then in one county (Larimer) surveyed owners were *less* likely to convert some of their land out of agricultural use if they believed local governments tended to be “even-handed” in such conflicts (rather than siding with non-farmers). An unsympathetic local government can prohibit or impose restrictions on needed farm investments or operations, such as building greenhouses or seasonal worker housing, installing a farm stand, or expanding livestock herds.

Such “right-to-farm” controversies were predictors of plans and expectations for development (or their absence) in a total of nine of our 15 counties. There are the four cases cited in the previous paragraph. Another four involved a relationship between (1) the owners’ expectations about developing the land and (2) whether the farming operations on their land had changed “for the worse” because “non-farmers lived nearby.” In two counties (Fayette and Orange) respondents were *more* likely to develop their land because of such changes, while in two others (Carroll and Ventura) surveyed owners were *less* likely to develop if they reported *no* changes for the worse. Finally, there were two additional counties (Carroll and Palm Beach) where development was *less* likely if the respondent believed that the right-to-farm legislation operative in the county was effective (Table 5.3).

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<sup>4</sup> If a plausible causal variable had a consistent direction in three times as many counties as it had a contrary direction, it was included in Table 5.7.

<b>Table 5.3: Traits of Surveyed Owners that Predict* (and May Have Shaped) Whether Owners Expected Any of Their Agland to Be Developed in the Next 10 Years</b>		
<b>Category of Predictors</b>	<b>More Likely to Expect Development if:</b>	<b>Less Likely to Expect Development if:</b>
Types of ag products raised on their owned land	<ul style="list-style-type: none"> <li>• Raised beef on their owned land in the county (<b>Ventura, Larimer</b>)</li> <li>• Raised grains (<b>Larimer, Fayette</b>)</li> </ul>	
Perceived sufficiency of production inputs		Less likely to develop if they had a sufficient supply of large-animal veterinarians ( <b>DeKalb, Burlington</b> )
Other aspects of the farm or ranch operation	Used seasonal labor ( <b>Dane, Madison, Burlington, Carroll, Larimer</b> )	
Conflicts with non-farmer neighbors over freedom to farm or ranch	<ul style="list-style-type: none"> <li>• More likely to develop if believed local governments tended to side with non-farmers (<b>Sonoma, DeKalb, Madison</b>)</li> <li>• If there had been a “change for the worse” in farming their land due to non-farmer neighbors (<b>Orange, Fayette</b>)</li> </ul>	<ul style="list-style-type: none"> <li>• Less likely if believed local government tended to be even-handed (<b>Larimer</b>)</li> <li>• Less likely if no “change for the worse” in farming their land due to non-farmer neighbors (<b>Ventura, Carroll</b>)</li> </ul>
Perceived effectiveness of public policies in helping farming or ranching		<ul style="list-style-type: none"> <li>• If right-to-farm legislation was effective (<b>Carroll, Palm Beach</b>)</li> <li>• If local zoning to protect agland was effective (<b>King, Dakota, Dane, Madison, Orange, Larimer</b>)</li> <li>• If purchase of development rights program was effective or desirable (<b>Dakota, DeKalb, Madison, Fayette</b>)</li> </ul>
Agland owner traits		If owner farmed full-time ( <b>Dakota, Orange</b> )

\*We used logistic regression to identify the predictor traits. All were statistically significant at the .125 level or better. For each predictor trait, Appendix 1 (at the end of this report) presents the significance level and a measure of the strength of relationship (the “odds ratio”) with the outcome variable. Included is the same information for predictors that qualified in just one county. Table 5.3 is limited to the same or related predictors that qualified in at least two counties.

Readers having positions in local government or willing to lobby officials may be encouraged by another set of findings in Table 5.3. They, too, indicate that *local government can make a difference in whether farmland owners plan to develop*. In six counties’ samples (Dakota, Dane, King, Larimer, Madison, and Orange), regression analysis found that, other things being equal, respondents who believed that local government zoning was effective “in maintaining an adequate supply of land for farming” were *less* likely to expect to development. Such zoning could have at least two relevant effects. If strictly administered in a particular zoning district where the surveyed owners have their land, its enforcement would make plans for development unrealistic. Also, if growth management tools are slowing down development or diverting it to other areas of the county, owners may tend to be optimistic about farming without interference and, hence, have better profitability expectations.

Related findings in Table 5.3 are the relationships in four counties (Dakota, DeKalb, Fayette, and Madison) indicating that owners supporting their local government’s use of its revenues for purchasing development rights (PDR) were *less* likely to have plans for development (other things being equal). As discussed in Chapter 3, such programs may reduce the pace of development or at least reshape it geographically to be less threatening to the area’s agriculture. The participating farmers are paid for their land’s development value, which can be several

thousands of dollars per acre. The PDR program may also create large contiguous areas of protected land, resulting in few non-farmer neighbors located close to agricultural operations and causing problems for them.

### **3. Investing in the Land's Agricultural Productivity**

A number of observers of the effects of urbanization on nearby agriculture have written about a phenomenon called “the impermanence syndrome” (Conklin and Leshner, 1977). William Lockeretz defined it as a set of attitudes that amount to not investing in the land's agricultural capabilities because the “farmers see land being developed around them and consider it inevitable that their land will be developed, too. . . . Given this expectation, it does not make sense to put in long-term improvements, or even to maintain existing capital facilities such as fences, buildings, irrigation equipment or drainage systems” (Lockeretz, 1989). Therefore, in each studied county we asked the surveyed owners, “Over the next five years, will you or the farmer of your land likely make any agricultural investments of the following types on your land in [named] County?”

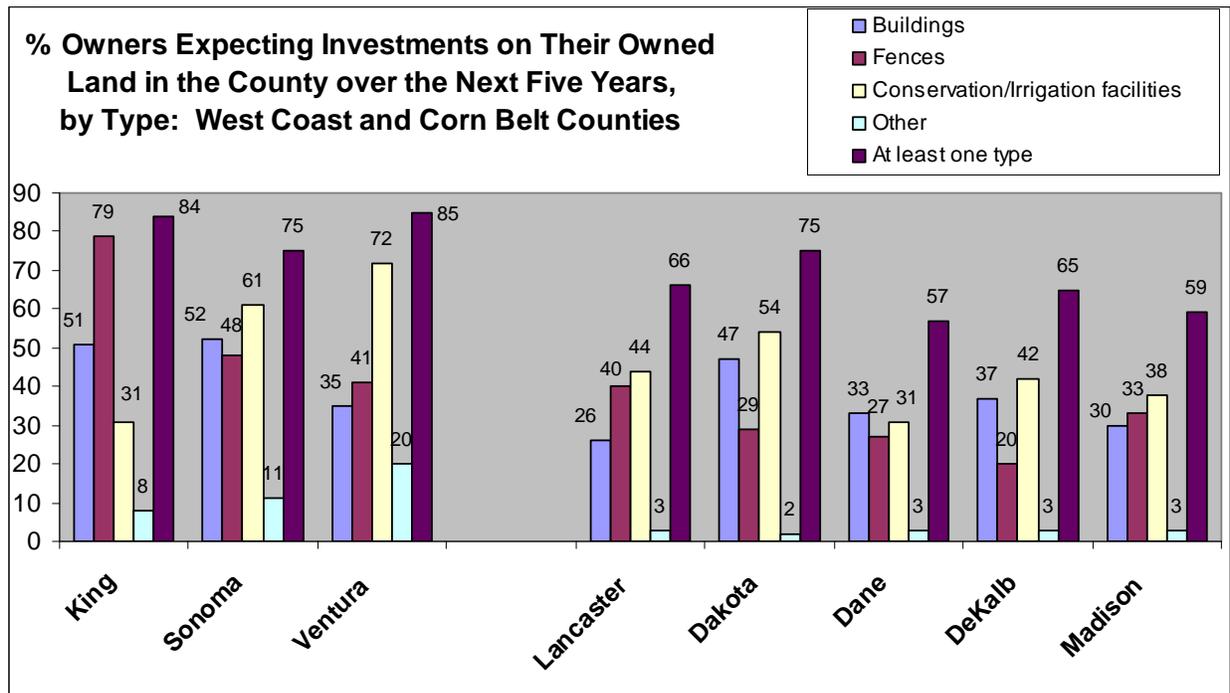
- “Erecting, replacing, or enlarging farm buildings;
- Building or extending farm fences;
- Installing or improving conservation or irrigation facilities;
- Other investments (please specify).”

Figures 5.3 and 5.4 present the responses to that question by type of investment and by group of studied counties. The percentage of respondents<sup>5</sup> reporting planned investments in farm buildings ranged from only 26% in Lancaster County to 54% in Burlington County, with a median value of 44%. The range was much wider for investment in farm fences—20% to 79%, but the median was the same. The difference came from two counties, King and Fayette, with high percentages of respondents expecting to spend money on fences—79% and 77%, respectively. They had the biggest percentages of respondents with large animals (i.e., hogs, dairy cattle, beef cattle, and sheep)—76% and 83%. Third ranking in both the fence-investing and large-animal-raising percentages was Carroll County. In Fayette County horses predominated. In fact, 84% of its respondents to the investment questions who planned to put money into fences also had horses.

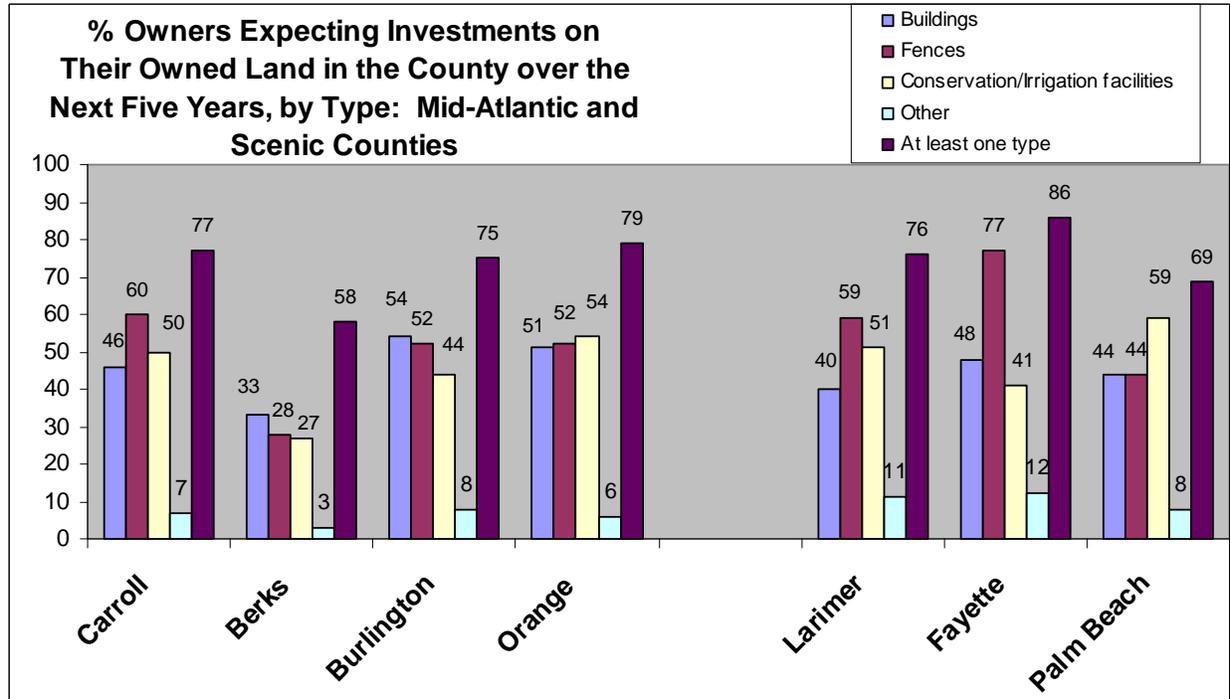
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<sup>5</sup> The respondents for these questions about planned investments consisted of surveyed owners who indicated that they expected to be farming in the county five or 10 “years from now” or who answered “yes” to this alternative response option: “Are you a non-farmer owner who expects to monitor closely for at least five more years how your land in the county is farmed?”

**Figure 5.3**



**Figure 5.4**



Entries for “conservation or irrigation facilities” in the two graphs ranged from 27% to 72%. The percentages for “at least one type of investment” (among these three specific objectives plus

“other investments”) totaled to a range of 57% (Dane County) to 86% (Fayette County). With more than a majority in each county reporting at least some kind of improvement, it looked as though a severe impermanence syndrome had not yet emerged in any of the 15 counties. However, our questioning on this subject was not comprehensive (e.g., no specific question about maintaining soil productivity), and the farm building percentages seemed low—only four counties with entries about 50% (King, Sonoma, Burlington, and Orange).

**Regression Findings**

We limited our hunt for causes of planned investments to the category “Erecting, replacing, or enlarging farm buildings” because the other two specific categories may lend themselves more, or as much, to promoting recreation and other lifestyle objectives rather than viable farming. Horse farm scenery is associated with attractive fences, and various conservation facilities (e.g., windbreaks, ponds, riparian buffers) add to the enjoyment or safety of rural living. The regression analysis for farm buildings identified six predictors of investment in farm buildings for the entire subsample, and each of the six qualified in the regression equations for at least two of the 15 individual counties.

<b>Table 5.4: Predictors of Whether “Over the Next Five Years,” Surveyed Owner or Farmer Will Likely Make Any Agricultural Investments of the Types “Erecting, Replacing, or Enlarging Farm Buildings”</b>	
<b>Predictor Trait of the Owner or the Farming Operation on Owner’s Land</b>	<b>Counties in Which the Trait Qualified as a Predictor</b>
Age (such as at least 55 years old)	The older the owner, the <i>less</i> likely such investment was expected in <b>Sonoma, Ventura, Lancaster, Dakota, Dane, DeKalb, Madison, Carroll, Berks, Burlington, Orange, Larimer, Palm Beach.</b>
Operators among them intended to stay farming in the county at least 10 years.	If operator intended to stay, the <i>more</i> likely was such investment in <b>King, Sonoma, Ventura, Lancaster, Dane, DeKalb, Carroll, Berks, Burlington, Orange.</b>
Operator had lined up a son, daughter, or grandchild to succeed him or her when operator retired from farming or ranching.	If operator had such a successor, the <i>more</i> likely was that kind of investment in <b>Dane, Madison, Carroll, Orange, Larimer, Fayette.</b>
Only hay was produced on the respondent’s owned farmland in the county.	If respondent produced only hay, the <i>less</i> likely was such investment in <b>King, Carroll, Burlington, Orange, Fayette.</b>
Grains were produced on the owned land.	If operator produced grains, the <i>less</i> likely was such investment in <b>Dakota, DeKalb, Madison, Carroll, Fayette.</b>
Nonfamily worked in the farm operation.	If operation had such workers, the <i>more</i> likely was that kind of investment in <b>Ventura, Berks.</b>

As Table 5.4 indicates, such investment was *less* likely in 13 of the 15 counties if the respondent was relatively older. Among the 743 surveyed owners (in all 15 counties) who were asked this question about investment in farm buildings and who were at least 55 years old, 32% expected such investments in the next five years, compared to 57% among their 544 counterparts who were less than 55. Presumably, many of the older owners believed that they would not farm or own the land long enough to benefit from spending money on farm buildings. Conversely, in 10 counties the operators among them who intended to remain farming in the county at least 10 years were *more* likely to expect such investments (Table 5.4).

A related, but statistically distinct predictor, was whether the respondent had a son, daughter, or grandchild lined up to succeed as the farmer or rancher. Regardless of age or intention to stay 10 years, surveyed owners in six counties who had such a successor were *more* likely to expect to

invest in buildings. Presumably, such investments were more justifiable because the close relative would benefit from them.

In five counties (Table 5.4) if hay was the *only* agricultural product raised on the respondent's land in the studied county, the likelihood of expecting to invest in any farm buildings *decreased*. Hay is a perennial crop that typically requires relatively little field time per year. Hay alone may therefore not have needed (at least in 2006) many new square feet of building for machinery, crop storage, worker housing, or other purposes. Alternatively, it did not earn enough to cover the costs of new facilities.

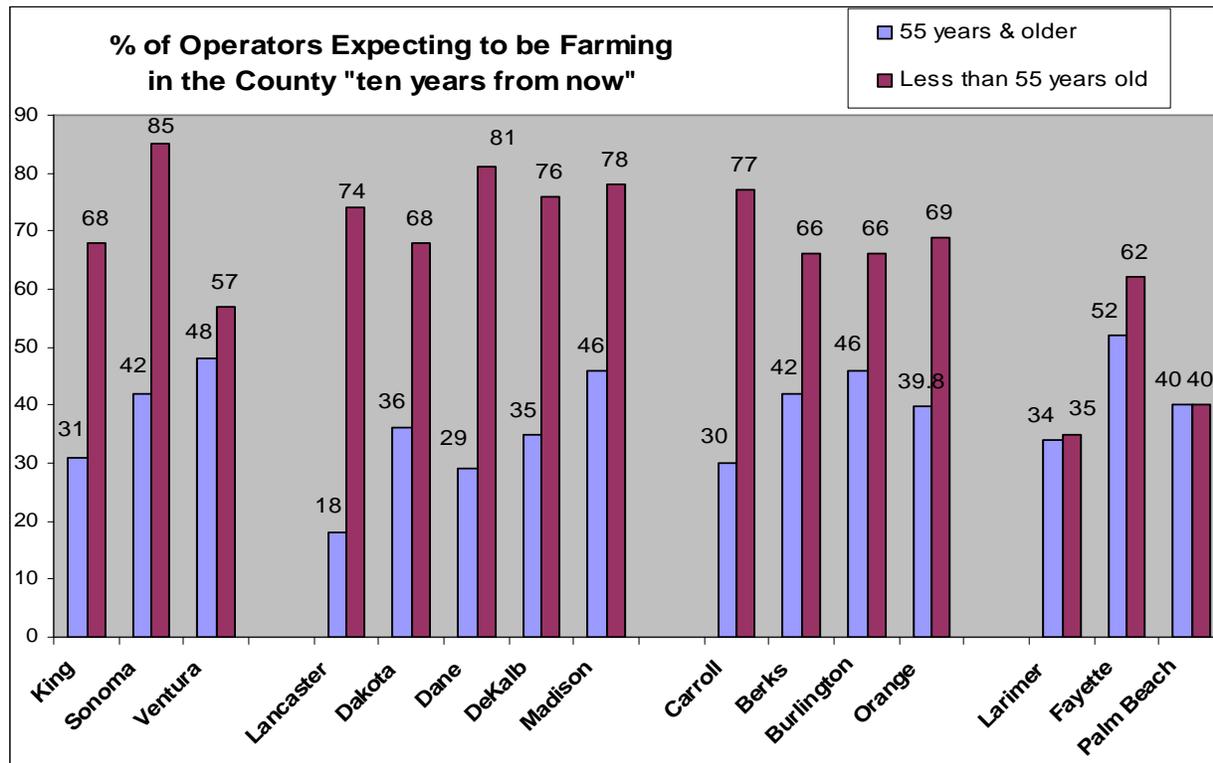
In five counties, too, grain production on owned land was associated with a *lower* probability of spending money on farm buildings. Also not normally a labor-intensive type of farming, raising grains in 2006 may have been seen as needing relatively little new enclosed spaces.

In two counties, if respondents reported having nonfamily labor, the likelihood of investment in farm buildings tended to *increase*. Perhaps the workers needed housing. The underlying cause was not gross sales (for which the presence of nonfamily labor might have been a proxy indicator). In both counties, we controlled for sales, and the predictor status of nonfamily labor persisted.

#### **4. Surveyed Operators' Expectations about Whether They Will Be Farming in the County in 10 Years (2016)**

Farmers planning to exit from agriculture in the county prematurely may signify trouble for the sector's viability. As "premature," we considered those cases where an operator was less than 55 years old but expected not to be farming in the studied county in 10 years or was unsure about his/her status at that time. Figure 5.5 shows that across the 15 counties, among the surveyed operators less than 55 years old, from only 35% in Larimer County to 85% in Sonoma County planned to stay at least 10 years. The median value was 68%. Among the respondents 55 and older, the range was narrower—from 18% (Lancaster County) to 52% (Fayette County), with 46% as the median. Larimer and Palm Beach counties stand out in Figure 5.5 in having relatively low values for both indicators and showing no or little distinction by age group. It looks as though most of the older as well as the younger operators were then planning to quit farming in the county.

**Figure 5.5**



**Regression Findings**

Like an earlier table on regression findings (Table 5.3), this one (Table 5.5) about farming another 10 years lists traits that qualified as statistically significant predictors in at least two counties and that were consistent in their causal “direction” (i.e., either always related to a higher likelihood or consistently linked to a lower probability).<sup>6</sup> Also included were single-county entries if that predictor was the opposite of another statistically significant variable and had the opposite kind of impact (e.g., local governments favoring farmers in right-to-farm conflicts versus siding with non-farmers).

According to the analysis, surveyed operators were *more* likely to expect to continue for another 10 years in Ventura and Palm Beach counties if they produced fruit (other things being equal). They were *less* likely to stay in Berks and Dane counties if they raised cows and calves and in Larimer and Lancaster counties if they produced two or more kinds of livestock. The differences may have derived from owner-operators’ satisfaction or dissatisfaction with the return on those products.

In two counties, Lancaster and Madison, having sufficient family labor was related to intending to stay at least 10 years, as was having adequate supplies of implements and related services in another two counties—Dane and Madison (Table 5.5). Then, in a total of eight counties, if a son, daughter, or grandchild was lined up to succeed the farmer as operator, he or she was *more* likely

<sup>6</sup> If a plausible causal variable had a consistent direction in three times as many counties as it had a contrary direction, it was included in Table 5.5.

to expect to continue for at least 10 years. Very close relatives as designated successors probably gave those farmers a strong motive to stick it out—such as to keep the operation in good shape for the heirs and perhaps also for the time when they, the current farmers, want to switch to working part-time with the heir-operators. This relationship between planning to stay 10 years and having a child or grandchild successor held up regardless of the respondents’ ages.

<b>Table 5.5: Traits of the Surveyed Operators and Their Operations That Predict Whether They Expected To Stay Farming or Ranching for at Least Another 10 Years</b>		
<b>Category of Predictors</b>	<b>More Likely to Stay 10 Years if:</b>	<b>Less Likely to Stay 10 Years if:</b>
Types of agricultural products raised on their owned land	<i>More likely if raised fruit (Ventura, Palm Beach)</i>	<ul style="list-style-type: none"> <li>• Less likely if raised dairy cows and calves (Dane, Berks)</li> <li>• Raised two or more kinds of livestock** (Lancaster, Larimer)</li> </ul>
Perceived sufficiency of production inputs	<ul style="list-style-type: none"> <li>• If had sufficient family labor (Lancaster, Madison)</li> <li>• Sufficient implements and related services (Dane, Fayette)</li> </ul>	
Other aspects of the farm or ranch operation	<ul style="list-style-type: none"> <li>• If expected a son, daughter, or grandchild to take over the operation (King, Sonoma, Ventura, Carroll, Burlington, Orange, Fayette, Palm Beach)</li> <li>• If their agland was located in a particular section of the county (Palm Beach)</li> <li>• Gross sales of at least \$100K (Dane, DeKalb)</li> </ul>	Less likely if their agland was located in a particular section of county (Sonoma, Berks)
Conflicts with nonfarmer neighbors over freedom to farm or ranch	<i>More likely if local government favored farmers when resolving these conflicts (Burlington)</i>	Less likely if believed local governments tended to side with non-farmers (Dane, Carroll)
Perceived effectiveness of public policies in helping farming or ranching	If purchase of development rights program was effective or desirable (King, Sonoma, Fayette)	
Agland owner traits		Less likely if were relatively older, such as at least 55 (King, Sonoma, Ventura, Dane, DeKalb, Madison, Carroll, Berks, Burlington, Orange, Dakota)

\*We used logistic regression to identify the predictor traits. All were statistically significant at the .107 level or better. For each predictor trait, Appendix 1 (at the end of this report) presents the significance level and a measure of the strength of relationship with the outcome variable (the “odds ratios”). Included is the same information for predictors that qualified in just one county. Table 5.5 is limited to the same or related predictors that qualified in at least two counties.

\*\*Two from this list, also adapted from the 2002 Census of Agriculture: “Hogs and pigs”; “Dairy cattle and calves”; “Beef cattle and calves”; “Poultry for meat or eggs”; “Horses”; “Sheep”; “Fish (trout, catfish, shellfish, etc.)”; “Other animals.”

Local governments’ perceived role in right-to-farm conflicts was a significant predictor of expecting to stay farming in three counties (Burlington, Carroll, and Dane). We saw the same kind of relationship in four other counties—regarding owners’ intentions to develop (Table 5.3). And according to regression analyses discussed a little later (Table 5.6), it helped to explain attitudes about the future of agriculture in six counties. Looking at all three tables (5.3, 5.5, and 5.6), we find that this kind of local government behavior made a difference in shaping important attitudes in a total of 12 separate counties.<sup>7</sup> The obvious policy inference is that if those local

<sup>7</sup> Since local government’s handling of right-to-farm controversies in Dane County qualified as a predictor in two tables, we count Dane County just once.

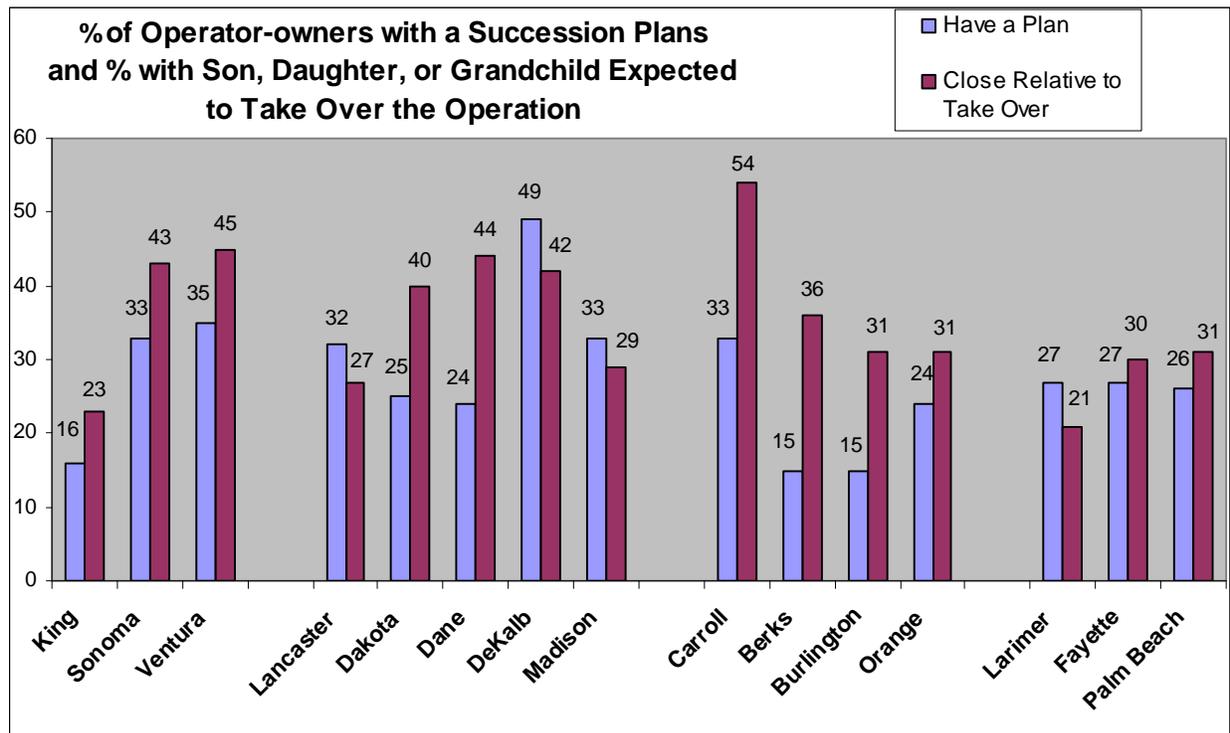
authorities could be “even-handed” or pro-farmer in resolving the controversies—other things being equal—there could be less development of agricultural land, more farm operators staying on in the county, and more optimism about the future that motivates both the farmers with positive attitudes and the other people whom he or she influences (including the next generation of farmers).

Should government or private agencies interested in the viability of urban-edge agriculture also consider encouraging farmers to line up close relatives as successor operators? As mentioned above, having a son, daughter, or grandchild in that role made a difference in eight of our county samples regarding operators’ intentions to stay in the county at least 10 years. Obviously, there may be insurmountable constraints, such as no relatives either living in the area or interested in moving there for a farm career. However, some deliberate planning might help. Cross-tabulation analysis found that in 12 of our 15 counties (including the eight just cited), statistically significantly higher percentages of respondents had designated close family successors if they had also “developed a farm succession plan that arranges for the transfer of ownership and management of the land to a relative or other person.” For example, among the surveyed Palm Beach County operators without a plan, only 25% had successors lined up, but among those with a plan already developed, the percentage was 68%. Of course, it is not clear what came first—the relative willing to take over the farm or the planning process that led to agreement on who would succeed the operator whom we surveyed. However, the statistically strong relationships that we found suggest that plans may help.

Figure 5.6 shows that there is room for improvement. Across the 15 county samples, from only 15% of the surveyed owner-operators in two counties (Berks and Burlington) to 49% in DeKalb County had developed plans. And from 21% (in Larimer County) to 54% (in Carroll County) had a son, daughter, or grandchild in line to take over the farm operation.

Table 5.5 on regression findings has two other sets of entries important to discuss. Not surprisingly, in 11 counties operators 55 years and older were *less* likely to expect to stay farming in the county for at least 10 years. Then in King, Sonoma, and Fayette counties, respondents who supported their county’s program of purchasing development rights to farmland were *more* likely to continue farming. As shown also in the findings for four counties about development expectations (Table 5.3), effective local programs to protect the agricultural land base seem to help shape positive farmer attitudes about the future. This next section of this chapter presents similar findings about use-value assessment, right-to-farm legislation, and zoning to protect agricultural land from conversion.

**Figure 5.6**

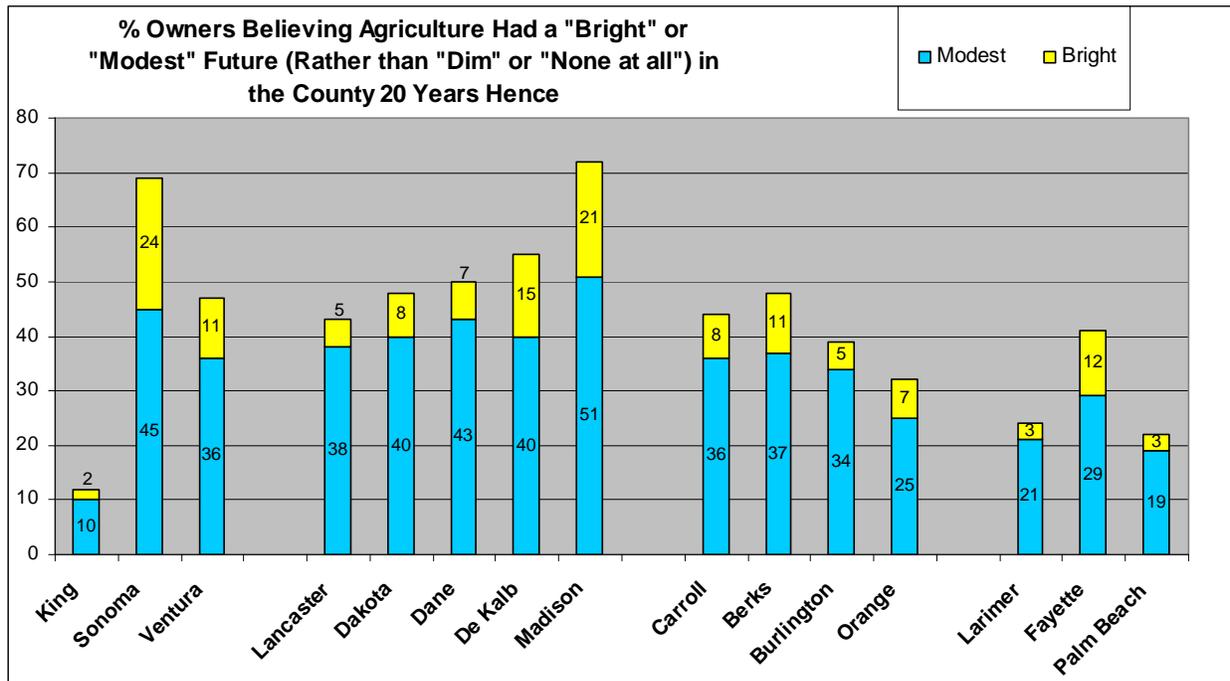


**5. Survey Owners’ and Interviewed Local Ag Leaders’ Predictions about the Future of Agriculture in the County in 20 Years (2026)**

At the end of the survey of agland owners, we asked, “Thinking ahead 20 years, what kind of future do you see for agriculture in [named] County? Bright, Modest, Dim, None at all, Not sure.” Virtually the same question was asked of the local experts whom we interviewed. However, in a free-flowing interview the wording is unlikely to be completely uniform.

Figure 5.7 presents the percentages of respondents who answered “bright” or “modest.” Across the 15 counties, the “bright” percentages were rather small—ranging from just 2% in King County to 24% in Sonoma County, with a median of 8%. The “modest” predictions were somewhat larger—ranging from 10% in King County to 51% in Madison County, with the median value being 36%. In combining the “bright” and “modest” percentages, we get values stretching from only 12% in King County to 72% in Madison County. However, in 12 of the 15 counties, less than a majority of the surveyed owners saw either a bright or modest future for agriculture. The regression analyses we did for each county tried to explain why.

**Figure 5.7**



**Regression Findings**

Like its similarly structured predecessors (Tables 5.3 and 5.5), Table 5.6 presents the predictor variables (the exact same or closely related ones) that were statistically significant for at least two counties.

As shown in Table 5.5 on the future status as an operator in the county, respondents in two counties (Sonoma and Ventura) with fruit crops being raised on their land were *more* likely to expect a relatively good future (i.e., being either “bright” or at least “modest”). Also in two counties (Sonoma and DeKalb), raising beef was associated with *negative* predictions—a “dim” future (other things being equal).

Surveyed owners in four counties (Sonoma, Orange, Fayette, and Burlington) were *more* likely to be positive if they or the farmers of their land had enjoyed in the past year sufficient supplies of labor—seasonal, family, or nonfamily. Also not surprising was the relationship between being satisfied with the profitability of markets for their land’s ag products and predicting a positive future—an association found in four counties: King, Ventura, Dakota, and Carroll. Similarly easy to interpret was the association between satisfactory competitiveness of markets (in Burlington and Orange counties) and predictions of a relatively healthy ag sector in the future.

Again, as with our analyses of responses about planning to develop owned land or to stay farming in the county for at least 10 years, owners’ perceptions of how local governments handled conflicts with non-farmers made a difference. In the Carroll and Palm Beach county samples, if the local authorities were seen to favor farmers or at least be “even-handed,” the surveyed owners were *more* likely to have a positive view of the future. Conversely, in four

counties (Dakota, Dane, Berks, and Fayette), if respondents believed local government sided with non-farmers, they were *less* likely to regard the future favorably.

<b>Table 5.6: Traits of Surveyed Owners and Operations on their Amland That Predict<sup>1</sup> Whether They Expected Agriculture in the County to Have “Bright” or at Least “Modest” Future 20 Years Hence</b>		
<b>Category of Predictors</b>	<b>More Likely to be Positive about the Future if:</b>	<b>Less Likely to be Positive if:</b>
Farm or ranch products raised on their owned land	<ul style="list-style-type: none"> <li>• If fruit was raised on their owned land in the county (<b>Ventura—at least 36 acres, Sonoma</b>)</li> <li>• Raised hay (<b>Dane, Carroll—at least 29 acres</b>)</li> </ul>	If beef was raised on their owned land in the county ( <b>Sonoma, DeKalb</b> )
Perceived sufficiency of production inputs	<ul style="list-style-type: none"> <li>• If had sufficient seasonal labor (<b>Sonoma, Orange</b>)</li> <li>• Sufficient family labor (<b>Fayette</b>)</li> <li>• Nonfamily labor (<b>Burlington</b>)</li> </ul>	
Other aspects of the farm or ranch operation	Used bank or other credit ( <b>Ventura, Fayette</b> )	
Satisfaction with marketing outlets	<ul style="list-style-type: none"> <li>• If was satisfied with the profitability of markets for the ag goods from their land (<b>King, Ventura, Dakota, Carroll</b>)</li> <li>• If satisfied with markets’ competitiveness (<b>Burlington, Orange</b>)</li> </ul>	
Conflicts with non-farmer neighbors over freedom to farm or ranch	<ul style="list-style-type: none"> <li>• If believed local governments favored farmers when resolving these conflicts (<b>Palm Beach</b>)</li> <li>• If believed local governments were even-handed when resolving the conflicts (<b>Carroll</b>)</li> </ul>	<ul style="list-style-type: none"> <li>• If believed local governments tended to side with non-farmers (<b>Dakota, Dane, Berks, Fayette</b>)</li> <li>• If there had been a “change for the worse” in farming their land due to non-farmer neighbors (<b>King, Lancaster, DeKalb, Burlington, Larimer</b>)</li> </ul>
Perceived effectiveness of public policies in helping farming or ranching	<ul style="list-style-type: none"> <li>• If believed use-value assessment was effective (<b>Lancaster, Dakota, Dane, Madison, Orange, Palm Beach</b>)</li> <li>• Right-to-farm legislation was effective (<b>Ventura, Larimer</b>)</li> <li>• Local zoning to protect agland was effective (<b>King, Ventura, DeKalb, Berks, Fayette, Palm Beach</b>)</li> </ul>	

We used logistic regression to identify the predictor traits. All were statistically significant at the .119 level or better. For each predictor trait, Appendix 1 (at the end of this report) presents the significance level and a measure of the strength of relationship with the outcome variable (the “odds ratios”). Included is the same information for predictors that qualified in just one county. Table 5.6 is limited to the same or related predictors that qualified in at least two counties.

Another set of findings of direct application to local governments deals with three kinds of policies that they legislate, administer, or at least can shape through appeals to their counterparts in state government (see the relevant discussions of each policy type in Chapter 3). In six counties (Lancaster, Dakota, Dane, Madison, Orange, and Palm Beach), surveyed owners who believed that agricultural-use assessment had been “very helpful” or at least “moderately helpful” in “keeping property taxes on agland in [named] County at acceptable levels” were *more* likely to predict a positive future. Also, the likelihood of favorable views of the future *increased* when (other things being equal) respondents in Ventura and Larimer counties believed that their state’s right-to-farm law was “very helpful” or “moderately helpful” in “protecting farmers and ranchers against unfair nuisance complaints.” The same kind of relationship was found in six counties (King, Ventura, DeKalb, Berks, Fayette, and Palm Beach), if the owners

believed their local zoning was “very helpful” or “moderately helpful” in “maintaining an adequate supply of land for agriculture in the county.”

In sum, for 12 of the 15 counties, it looks as though the perceived effectiveness of one or more of these three types of land-use policies shaped agland owners’ predictions about the health of agriculture 20 years into the future. *These findings strengthen our conviction that the behavior of local governments can substantially affect the future of farming in their counties.*

### ***Interview Findings***

A total of 192 interviewed ag leaders provided input about the viability of their county’s agriculture 20 years into the future. The other interviewees either preferred not to give clear evaluations or were not asked the question. We added it a couple of months after the project’s interview phase had started. Table 5.8 presents the percentage breakdown of the opinions given for counties where at least 10 interviewees answered the question.

Although the interviewees tended to be more positive about the future than did the surveyed agland owners (compare Figure 5.7 and Table 5.7), with one county being an exception, less than a majority of the local experts believed that agriculture’s future was “bright” rather than “modest” or worse. Fayette County’s entry in the interviewee table is 58%. The next highest value is Sonoma County’s 47%, third ranking is DeKalb County’s 41%, and then Ventura County’s 30%. Only time will tell which group—the 10 to 25 ag sector leaders per county—or the 100 to 174 agland owners—predicted more accurately. However, from the interviewees we tended to get their reasons for opinions.

The following analysis of those reasons helps us to understand the importance—to the counties’ agricultural sector—of issues covered in earlier chapters, such as choice of products to raise on the urban edge and marketing outlets to use; the need for restrictive zoning and other farmland-protection tools; and the influence of climate, soil, and other geographic features. Included also were recommended ways to adapt to urbanization.

### **The Land Constraint**

The type of argument most frequently articulated by the interviewees concerned the sufficiency of land in the county for farming or ranching. Eighty-six of the 192 opinion-givers (or 45%) talked about the quantity of land and/or its affordability to farmers. Many were pessimistic, referring to the continued conversion of land out of agricultural use and to the existing or likely future lack of political will to preserve an adequate land base. However, others trusted their local governments to administer the current system of land-use controls with sufficient strictness and/or to place enough land under conservation easements.

**Table 5.7: Interviewed Agricultural Leaders’ Predictions of the Future of Agriculture in their Counties 20 Years into the Future: Percentage of Respondents by Response Option**

County	Bright	Modest	(Bright or modest)	Dim	None at all	Not sure or unwilling to select one of the given options
King (n = 17)	29	29	(58)	29	0	13
Sonoma (n = 19)	47	42	(89)	5	0	6
Ventura (n = 10)	30	70	(100)	0	0	0
Lancaster (n = 14)	7	50	(57)	7	7	29
Dakota (n = 16)	12	69	(81)	13	0	6
Dane (n = 18)	0	50	(51)	28	0	22
DeKalb (n = 17)	41	53	(94)	6	0	0
Madison (n = 10)	20	40	(60)	0	0	40
Berks (n = 11)	9	45	(54)	18	0	27
Burlington (n = 10)	0	40	(40)	10	0	50
Larimer (n = 25)	0	33	(33)	<b>59</b>	8	0
Fayette (n = 19)	58	42	(100)	0	0	0

**Conversion of too much land out of agriculture:** Even interviewed leaders in counties with respected agricultural protection zoning policies (e.g., Dakota and DeKalb) and significant purchase-of-development-rights programs (Sonoma, Berks, and Larimer) were concerned about the cumulative effect of conversion of agland. Larimer County had the additional vulnerability that cropland needed rights to irrigated water, whose costs were increasing and whose delivery systems were jeopardized by loss of farm customers. If too many agricultural users “upstream” sold their rights, the water company might not be able to justify sending water down the irrigation ditches to the few remaining customers.

- “No future; farmers move from west to east Washington, where land is much less expensive, like \$1,500 an acre compared to [as much as] \$200,000 to \$250,000 here.” (King County)
- “A modest future because lots of land development is happening, so less land is available for agriculture.” (Sonoma County)
- “Dim, because of alternate uses of the land, and the prices of land will be too high to till it.” (Lancaster County)
- “Modest, I would say, mainly because of the impact of development. If we continue to grow like we are, we’ll look like California.” “Dim. I think the land will be sold for development as the price goes up. This is the key to my dim rating.” (Dakota County)
- “Modest. The culture is positive, but the developers battle and put significant pressure on landowners and the cities. The pressure is impossible to resist even with understanding and planning. Farmers are aging and will easily bow to the pressure. Zoning [which is by township] varies across county, so consistency becomes a problem.” (Dane County)
- “Modest. The county will most likely retain present zoning policies, but it’s unknown as to how those policies will be able to change the development patterns that are now firmly established to the east [closer to Chicago]. Will DeKalb County be different?”
- “Modest—this is because there is a lot of growth on the Front Range [in Colorado], and the price of land and water is too high.” “Basically, very bleak. The city needs water. The

developer buys water, and then the water becomes very pricy. Farmers cannot compete with developers in buying the water rights.” “In case the two farms that are my neighbors will quit farming, then I won’t get irrigation . . . because there are not enough people who ask for it, and then my farm will be good only for graze pasture.” (Larimer County)

***Importance of land-use controls:*** As discussed in Chapter 3, several counties (King, Sonoma, Ventura, Dakota, DeKalb, and Fayette) and certain townships in Berks County had the political will to legislate and implement effective zoning protection. Moreover, in all or nearly all those cases, there was successful cooperation with cities whose annexations might otherwise have frustrated the agricultural zoning for unincorporated areas. In our interview data about the future of agriculture, the DeKalb County entries stand out for the extent to which local leaders who predicted a “bright future”—six of the seven—based their expectations entirely or in part on the continuing success of the county’s pro-agriculture zoning policies. However, in DeKalb County and elsewhere, interviewed leaders were aware of the dependence of these land-use controls on the electorate’s continuing acceptance of them.

- “Bright. There’s a commitment by the community. The chances now of sprawl are very low to none.” (Sonoma County)
- “Modest. SOAR [Save Open-Space and Agricultural Resources] will keep us here [farming] as long as it continues. If that zoning disappears, look for quick changes in the county to development and failure of agriculture. We’ll end up being estates really fast, and it will be the death knell for us all.” (Ventura County, right next to Los Angeles County in California)
- “Modest. It really depends on whether they enforce [40-acre] zoning or not. If they do, there will be opportunities for farming.” (Dakota County)
- “Bright. The county has done a good job to restrict development adjacent to existing municipalities.” “Modest to bright. If our county board does what they are supposed to do with our comprehensive plan, the future will be good. If they let subdivisions pop up all over, we will have a problem.” (DeKalb County)
- “Modestly optimistic.” “Philly [Philadelphia] developers are starting to move in—for example, into Exeter. A lot depends on the local officials and how they deal with agricultural zoning.” (Berks County)

***Hopefully, long-term protection through purchase of development rights (PDR):***

Antidevelopment easements attached to deeds should keep land in farming or available for agricultural use for many years, if not in perpetuity. As with our findings on other policy tools, we are reporting observations from only a small number of counties. We cannot generalize about the tools’ effectiveness, but only suggest that what we found in those counties may be helpful to citizens there and be worth checking out in other communities with the same type of program. For example, as suggested in the quotations below, PDR programs may make a significant difference in the long-run supply of land for agriculture. However, as mentioned in two of these quotations, effective zoning may be a necessary partner with PDR.

- “Bright. The future of agriculture in Fayette County is bright. I think that because there are permanent efforts to ensure farming in perpetuity. The goal of the PDR program is to have 50,000 acres in conservation easements. This represents more than one-third of the rural land available in Fayette County.” “Bright. There is enough awareness and effort

from the different groups in the county to maintain agriculture in the future. The PDR program is the one that will make the difference for our county.” (Fayette County)

- “Modest at best. I think the easement program [begun in 2003] may have an impact on this.” (Dakota County)
- “Dim, unless something happens that does something about growth. No matter how much land you preserve, though, most of it [the county’s entire land base] will turn into houses.” (Carroll County)
- “Modest. There will be enough land for farmers who want to stay. The preservation program and municipal zoning will keep a lot of that ground from residential use.” (Burlington County)
- “Modest. We will still be here because we have a lot of eased land. But it does depend on whether the zoning is upheld or not, and whether there are farmers—we know that the markets are here.” (Berks County)

Section 5 of Chapter 3 has more discussion of local experts’ opinions about the long-term effects of PDR in Carroll, Berks, and Burlington counties.

### **Types of Enterprises Promising Future Success**

In explaining their predictions about the future of agriculture in their counties, the interviewees’ second most frequent type of argument was about the kinds of agricultural enterprises that were likely to do well. Twenty-eight percent provided such input. These arguments fell into three main groups—advocating or questioning the viability of (1) smaller farm operations, (2) those producing food for local consumers, and (3) those emphasizing high-value crops. Of course, the same farm may have all three of these traits. A potentially critical advantage for the smaller operation is that it probably needs less of the most expensive kind of input in an urbanizing context—land.

#### ***Smaller farm operations:***

- “Bright. There’s a bright future for small-scale, sustainable farms.” “Bright, niche farming will be at the high end, with organic and value-added.” “Modest. Small farms with higher intensity for niche markets will do well, as will ag tourism farms.” “Modest. The organic small farms doing direct marketing will prevail.” “Dim. Smaller farms will not help. People need to pay more for produce.” (King County)
- “Bright or dim. For smaller farms—those converting to urban uses—such as horse farms, organic vegetables, orchards—I see a bright future. For the large grain and dairy farms, I see a dim future.” (Dane County)
- “Your hobby farmers are going to start to pop up a lot.” (Orange County)
- “Bright also for the hobby farmers.” “Bright for the small ones because they can still make some profits, and they also have other sources of income. Dim for large-scale farmers due to growth.” (Larimer County)

***Farms producing for local food customers:*** In the several studied counties located near to very large population concentrations, the total potential clientele for local food production was encouraging.

- “Very bright. The metro area [Seattle] will get together to create markets that will bring local farm products to table on a 12-month basis.” (King County)

- “Bright. A lot of consumers are in the area [San Francisco Bay Area] for farmers to sell goods to.” (Sonoma County)
- “Modest. Local foods will help us hang in there. I farm lemons and avocados, [and am] experimenting with some alternative citrus crops for local sales.” (Ventura County)
- “Modest. Even 20 years from now the vegetable segment will still have operations in existence, taking a short trip to a very demanding but very profitable market outlet [the northern sector of the greater New York City area].” (Orange County)
- “Dim. I see very little farming in the future for large or small farms. There may be some future in garden plots where farmers raise their own produce and sell it at farmers’ markets. These types of operations are surviving.” (Dane County)

***Examples of statements about high-value products for wholesale or direct marketing:*** Urban-edge farms may have no comparative advantage in producing many crops with high per-unit values like wine grapes and vegetables for processing. However, horse farming near population concentrations can mean sizable clienteles for accessory enterprises like boarding and recreational riding. Also, wine grape farmers within a Saturday or Sunday afternoon ride from urban areas can enhance income through establishing their own wineries, sales rooms, and tasting facilities. And if the farmland has high amenity values and some member(s) of the household is willing to learn hospitality-industry skills, the operation can add a bread-and-breakfast component. These entrepreneurs join other farmers who see the often-wealthy new residents to their county as customers for specialty agricultural products.

- “Bright, because of wineries. Otherwise dim; but organics are good.” “As long as wine demand continues, this area will continue to prosper. I am actually bullish because of demographics. The core wine drinkers are the baby-boomer group, and we are getting older, and our kids love wine. They have seen it on the table [at home], and they are oriented toward it.” “I am blessed with a wealthy market for the B&B, for the grapes, and any vegetables that I might grow.” (Sonoma County)
- “Modest. The future of our county’s ag will be determined by international markets. Some are changing to strawberries because they cannot ship them from other countries. It is a U.S. niche.” (Ventura County)
- “Rather modest; dim for others. It will only be bright for the few who can raise specialty crops. There will be new opportunities, different crops for different reasons, and DeKalb County farmers will adapt if they are interested.” “Will see an increase in more intense operations, and the higher incomes coming in from the east [Chicago] will support agriculture, such as pick-your-own operations.” (DeKalb County)
- “We have wealthy, high-class people who think that horses are appropriate for them: jumping stations, boarding. The racing horses make up about one-third, but they earn much more money.” (Burlington County)
- “Money is moving up from New York City, and everybody’s got to buy their daughter a \$20,000 horse.” (Orange County)
- “Modest. There is still interest to help sustain some level of agriculture in the county, although I expect to see more of the specialty-type crops, more value-added products. However, for the traditional agriculture, the future is dim.” (Larimer County)

### **Governmental Regulations that Hinder Agriculture**

The third most common type of reason given by interviewees for their predictions for the future consisted of complaints about governmental regulations that hinder agriculture in their counties. Eleven percent of the total respondents discussing the predictions gave this kind of argument. They can be divided into two subgroups: those concerned about environmental regulations and those complaining about neighbors' objections to what the survey respondents regarded as necessary farming practices. Several of the former kinds of arguments arose from King County sources who objected to water-quality regulations that particularly affected livestock and other livestock operations. However, both kinds are "right-to-farm" issues, and give support to the regression findings discussed earlier in the chapter about how local governments' handling of such issues can make a difference in farmers' attitudes toward the future.

#### ***Examples of statements about environmental restrictions:***

- "Dim. Authorities are doing everything against saving the ag sector. Turn around fences off creeks [mandatory setbacks for fences]; disallow number of cows on the land because of per-acre manure rules." "You just don't see people farming under ever-increasing restriction from Seattle." (King County)
- "The only problems that I fear for our future are regulatory. Specifically, excessive and pointedly hostile environmental regulations." (Sonoma County)
- "Modest. People are skeptical about land-use planning and manure regulations. People are 'holding their breath' to see what will happen with these issues." (Dane County)

#### ***Neighbors seeking to limit what they perceived to be farm nuisances:***

- "Modest. Because of regulations and more homeowners, there's a risk that agriculture will move where it is less difficult." (King County)
- "Dim. There has been talk of a local senator throwing out the [state] right-to-farm law. This has farmers worried. Farmers fear they could get sued for anything." (Dane County)
- "Bright. One of my biggest concerns is a farmer's rights as to what one can do on his property, such as wind power, livestock, and roadside stands. There is apt to be a lot of controversy by people who don't have a right to dictate to a farmer." (DeKalb County)
- "Some of them [local farmers] view complaints by non-farmer neighbors as the beginning of the end." (Burlington County)

### **Favorable or Problematic Geographic Features**

The last group of arguments to be considered (from just 7% of the relevant respondents) focused on geographic features of the county. Not surprisingly, Sonoma interviewees pointed to the special climatic conditions that supported their wine-grape growers. At the other end of the spectrum, experts on Larimer County's agriculture lamented the chronic lack of rainfall and growing competition from urban users.

- "Bright. There is only one Sonoma County in the world, and we grow world-class Pinot Noir and Chardonnay. We have going for us the climate. That's a huge thing." (Sonoma County)
- "Modest. We have good soil and a 365-day growing season." (Ventura County)
- "Bright. I think we are in a good position for several types of markets—rail, ethanol, Chicago processing, and exports." (DeKalb County)

- “Modest. There is too much population growth and tremendous challenges with the water and land. The main problems are prices of land, and availability of land and water is the worst.” (Larimer County)

## **6. Attitudes Toward the Future: Recommending Young People to Farm in the County?**

Although, as discussed in Chapter 4, some new farmers may be transplants from other counties nearer urban centers, many may need to be young people who will start and/or mature their agricultural careers in the counties we have been studying. They will gain knowledge of local conditions, personal connections, and friends who provide information (and perhaps emotional support) to help them survive, if not flourish, in an urbanizing environment. Therefore, we aimed to ask virtually all the interviewed leaders this question: “Would you recommend that a smart, hard-working young person with an agricultural background be a farm operator in [named] County? Why or why not?” The traits “smart,” “hard-working,” and “with an agricultural background” were specified so that responses would concentrate on other causal conditions, such as the availability to younger farmers of land and credit and also the kinds of operations with which they should start.

A total of 219 interviewed leaders answered this question, and very few made unqualified positive or negative recommendations. Table 5.8 presents the percentage breakdowns of the opinions given for counties where at least 10 interviewees addressed the question. The “yes” values ranged from zero to 15%, with a median of zero, while the entries for unqualified “no” values extended from zero to 62%, with a 7% median (Table 5.8). In all except one county (Larimer), majorities of respondents—67% to 100%—gave conditional answers, amounting to “yes, if they do this” or—in some cases—“no, unless they have this trait.” However, Larimer County, with 29 interviewees, had only a third conditional responses, and 62% were clearly negative. Here are three examples:

- “No, I would recommend them to go to a county close by where the price of land is much cheaper, and there is more availability of water. In Larimer County there is not enough ground and water. This makes the cost of operation higher. There are more taxes on the land, [and] the water is more scarce and more expensive.”
- “I see a lot of the established farmers, younger farmers, saying ‘I’ve had enough of this.’ They are going up to northeastern Colorado or Pine Bluff, Wyoming, or over to Nebraska, taking them back to traditional agricultural settings where you don’t have a lot of hassle with the urban fringe. It’s a good use of their assets; sell here and buy land that costs half the price there. And have an environment more conducive to farming and have more rainfall.”
- “Absolutely not, because they cannot afford the ground. Even if they inherit the land it doesn’t pay off to do agriculture on the land given the return on investment.”

<b>Table 5.8: Interviewed Agricultural Leaders' Recommendations Whether "A Smart, Hard-Working Person with an Agricultural Background Should Be a Farm Operator" in County: Percentage by Content Type of Response</b>				
<b>County</b>	<b>Unqualified "yes"</b>	<b>Qualified "yes" or "no"</b>	<b>Unqualified "no"</b>	<b>Gave information but no clear opinion</b>
King ( <i>n</i> = 15)	7	67	26	0
Sonoma ( <i>n</i> = 15)	13	80	7	0
Lancaster ( <i>n</i> = 16)	0	100	0	0
Dakota ( <i>n</i> = 16)	0	69	31	0
Dane ( <i>n</i> = 20)	5	75	15	5
DeKalb ( <i>n</i> = 14)	0	100	0	0
Carroll ( <i>n</i> = 10)	10	80	10	0
Berks ( <i>n</i> = 13)	15	77	8	0
Burlington ( <i>n</i> = 11)	0	91	0	9
Orange ( <i>n</i> = 19)	0	95	5	0
Larimer ( <i>n</i> = 29)	3	34	63	0
Fayette ( <i>n</i> = 23)	0	78	22	0

### ***The Land Constraint and Solutions***

In each county and overall, the type of causal condition most frequently mentioned was the land constraint, which in low-precipitation areas like Larimer County included water rights attached to the land. Sixty-three percent of the 219 interviewed leaders who addressed our question about the future of young farmers gave some condition about land. No other type of input of production was mentioned by more than three interviewees. Presumably, the near-absence of comment about manufactured or processed inputs (e.g., ag chemicals, implements, seeds) reflects both the saliency of the land constraint and the largely satisfactory levels of supply as of the period of our fieldwork. Contributing to that perceived status may have been the various adaptations that both suppliers and farmers made to the closings and consolidations of retail outlets for those inputs (see Section 7, Chapter 4).

The very limited mention of labor problems (just three comments) in the context of recommendations to young farmers may reflect not the lack of such problems (see Section 2, Chapter 4) but perhaps the interviewees' assumption that young people starting out in farming would be limited largely to their own labor and that of spouses.

As indicated just above in the Larimer County quotations and below in interview materials from other counties, some respondents simply lamented the high cost of land and urged young people to move to less-urbanized areas. As also discussed below, others interviewees examined the benefits and limitations of various solutions, particularly the assistance that farm families can provide to their young people.

Agricultural protection zoning, purchase of development rights, and other tools to slow or shape the pattern of development were also relevant. They were seen as helping to keep the supply of farmland ample enough (relative to demand) that prices did not become impossibly high.

## **Affordability of Land**

- “If he is a son or daughter of an established farmer, or marries into land, or has money from another career, you can try it. But there are very few self-made farmers any more. It’s a 10th of 1 percent who can do it. (Sonoma County)
- “Hell, no. I wouldn’t even suggest my children to get into it [farming in the county]. How would I say for someone else to get into it? They would have to own the land. Renting is hard to find and costly.” (King County)
- “Yes, but you really have to own the farm or have a relative in it. Very expensive land. Maybe best if you go somewhere where land is cheaper” (Ventura County)
- “No, unless you have family in farming here. Move to adjacent county or elsewhere.” (Lancaster County)
- “Not likely. Depends on their financial status with money or relatives to help. There are young farmers here now that love it, but I’m not sure they will be able to make it work in the future unless they have land to sell in the north [of the county] and can buy in the south [away from the metro area, where prices were cheaper per acre]. If it was one of my boys, I’d tell them it wouldn’t work.” (Dakota County)
- “If a young person does not have family ties, I recommend going north and trying to farm in a different county where the land values aren’t as high.” “The price of land [here] is so high, you have to be in an established family, either born or married into.” (Dane County)
- “If land is currently selling for \$8,000 [per acre], then there is a tremendous investment to get enough acres to make a grain farm profitable. This would make purchasing land and succeeding very difficult.” (DeKalb County)
- “No, farm ownership is almost impossible here. You need a 200-acre base for a new farmer. . . . If you are just renting, it won’t work. I would have somebody go up to western Pennsylvania or western New York.” (Carroll County)
- “No, I wouldn’t tell them to do it. The money to start the farm would kill them. He would have to start small and fight for acreage all the way along. And the acreage would be spread out and not in one place.” (Berks County)
- “Not many [new people] entering; the price of real estate is an obstacle. Because the amount of agricultural land is decreasing, it’s difficult for young farmers to break into the agricultural sector.” (Burlington County)
- The future of dairying in Orange County is zero, unless dad owns the farm and gives it to you and you have no debt.” (Orange County)
- “Yes, if they have the capital to start or if they inherit an existing operation. They can get good money from the horses. However, for general agriculture or for people that do not have the money or the land, I wouldn’t advise anybody. The land is just too expensive.” (Fayette County)

## **Needed Support from Family**

Interviewed leaders described a variety of types of family support that young people needed to get established, including the gift or bequest of land, discounted prices for purchasing and renting land, the loan of equipment, and sharing “grapevine” information. In several cases, the interviewees were thinking of the extended family, such as grandparents, uncles, and aunts.

***“Deals” for land purchases:***

- “Many that are going into farming are using their parents’ land and equipment, and the parents are cutting them deals.” (Dane County)
- “If I was a son or daughter of a current farmer, maybe I’d take over from my parents—if the land was reasonably priced by my parents. Otherwise, if I really wanted to set myself up in a profitable business, I would look at Pennsylvania or New York. Carroll County is just too close to Baltimore. Acres are selling at \$5,000 to \$6,000 [per acre] and upwards of \$10,000. We are not running out of farmland; it is just too expensive.” (Carroll County)
- “If he stays, my grandson will eventually get the farm. We’ll make a deal with him.” (Burlington County)

***Discounting or sharing cost of rents:***

- “[He needs] low rent from parents.” (Sonoma County)
- “It depends on his/her capital structure. . . . Unless he has that resource from a family standpoint or someone willing to sell or rent land at a reasonable price, it won’t be lucrative. (Dakota County)
- “I would say they need to be related to someone already in agriculture in the county or vicinity who can sponsor them in a support capacity. Rents may easily be \$180 an acre; so, even if the young operator was willing to only rent land, it may not be affordable. I would be much more encouraging to the young person if he was a child of an existing DeKalb County farmer.”

***Where does a rented-only operation lead?***

- “Guys start off renting, buy some cows, and after three to four years they start to buy equipment. We’ve had a bunch of young kids, 20 to 24 years old, rent here and start up, but they can’t buy the land. They go elsewhere. They need fathers or other family members to let them inherit the land.” (Orange County)
- “For some people, leasing might help them get started, but for small acreages.” (Larimer County)
- [Not owning the land, the interviewee will not have that resource to cash in at retirement time. Therefore, he is looking for an operator to buy the business]. “I would like to set up a direct agreement with the new operators. They would end up paying us over a period of time. Like a reverse mortgage for as long as we live.” (Sonoma County)

***Share the “insider” or “pecking order” status:***

- “Because the amount of agricultural land is decreasing, it’s difficult for young farmers to break into the agricultural sector. The established farmers have relationships with landowners, and they get first crack.” “In our area, there is almost an unwritten . . . ‘pecking order’ that determines who the next successors are after the current farmer dies or gives up the lease. Farmers who ignore this are often shunned by other farmers and considered ruthless and cutthroat.” (Burlington County)
- “The exception to this would be a young person whose grandfather owns land in the north, sells that land, granddad gets money, and the kid buys land in the south. You cannot do this as an outsider and take a loan and buy land.” (Dakota County)

- “Yes, if they can find a spot to do it. If they are not from the area, it will be hard to find land to rent or buy.” (Larimer County)

***Become a partner or full owner gradually:*** Several interviewees recommended or at least speculated about young farmers working toward part or full ownership through contributions to the business that owners reward with equity shares of some kind.

- “There is a fair amount of leasing of vineyard land. There are a lot of people who don’t want to tinker with it. They want to sit there with their wine and watch others take care of it. Start with leasing five acres, earn sweat equity, [and] borrow from mom or dad. But ownership is tough. We [the bank] want about a third down.” (Sonoma County)
- “Yes, but they will have to be mentored by an older farmer. Land value may be too high. Must have desire and sweat equity.” (Lancaster County)
- “Their best opportunities may be in working into a transition ownership with an existing or retiring farmer. . . . It takes training, education, job experience, business skills, and a real desire.” (DeKalb County)
- “There is the chance that you could work with a relative and work your way into a farm situation. I do know a few instances where that occurred, but it is difficult.” (Carroll County)
- “Occasionally, an older farmer wants to retire, and a young farmer buys in gradually. After five years, he’ll buy a piece. Two or three [cases] so far. Not sure if they get the land at a discount. Could be intra-family.” (Burlington County)
- “How to get started? Lease or rent to own, with sweat equity. They work, and uncle pays them a salary. But the difference between what they get and what they really provide to the uncle pays for 10% of the farm a year. Until nephew or junior has some equity, would any bank look at him?” (Orange County)

### **Choosing Suitable Product Mixes and Marketing Outlets**

The apprenticeship-type learning implied in most of the above quotations about becoming partners or full owners reminds us that financial support from family would not likely be a sufficient condition for success. As with any other kind of entrepreneur, the young farmer must choose suitable product mixes and marketing outlets. Thirty-two percent (or 70) of the 219 interviewees who addressed our question about young farmers made recommendations about what to raise. The most frequently endorsed kinds (by 74% of this group of the 70) were products of likely appeal to urban and suburban consumers. They were variously titled: organics, “niche market” foods, high value or value-added products, vegetables, and fruits.

Two-thirds of the same interviewees who encouraged this grouping of products also recommended that they be directly marketed. The primary justification for promoting both was the higher expected revenue per acre from the relatively small operations that the young farmers were likely to have:

- “Yes, [there are] great role models in the area that have made it successful. . . . But access to land is the biggest hurdle. Must be a marketer, people person. Must lease land and do direct marketing.” (King County)
- “Yes, two scenarios . . . Either you have a family with land, or you rent and do direct marketing of some sort. Lots of opportunities with urban agriculture.” (Lancaster County)

- “Direct marketing is better suited for urban development. . . . People from Larimer, Fort Collins area, support direct-marketing initiatives.” (Larimer County)
- “Direct-marketing opportunities are more appropriate for a young farmer that would like to start in Fayette County because they just need a small acreage operation and there is a lot of demand.” (Fayette County)

In a separate but related interview question, we asked the local leaders about changes in the types of farm enterprises they expected to be operating in the county 10 years hence. Presumably, anticipated increases indicated the kinds of operations that buyer demand, input conditions, and other causal circumstances would support. At least from the perspective of 2005–2007, they represented potential opportunities for younger as well as older farmers. Table 5.9 lists the most frequently mentioned types of expected changes from left to right. For some counties, the second- or third-ranked changes comprise subgroups of the first or second group. An example is King County leaders who predicted an “increase in farms producing for niche markets” were members of the larger first group who anticipated more “small operations.”

The farm consolidations predicted by some experts for four Corn Belt counties, as well as for Berks, Burlington, and Fayette counties, would seem irrelevant to younger farmers, except if they worked their way up to becoming operators’ heirs or hired managers. More attainable in the short or medium term should have been becoming operators of some of the new niche-market farms expected in King, Dane, and the four Mid-Atlantic counties. In addition to the growing urban and suburban markets, they frequently had the advantage of modest land requirements.

However, in some land markets, buyers seeking to be hobby farmers may have current income and/or savings sufficient to outbid the young buyers.<sup>8</sup>

- “I expect more farms . . . just raising a few pleasure horses. These are people who have another source of income, stable and high—such as doctors and lawyers.” (Fayette County)
- “There are successful people interested in part-time farming. Their well-being has been established, though they’re not getting into it for a tax write-off. They want to be profitable. They’re growing in our area, primarily the horse industry.” (Orange County)
- “[More] niche farming. . . . Rich people from New York will buy the preserved land and lease it out.” (Berks County)

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<sup>8</sup> Said one Fayette County respondent, “I expect more farms . . . just raising a few pleasure horses. These are people who have another source of income, stable and high—such as doctors and lawyers.”

**Table 5.9: Interviewed Agricultural Leaders' Predictions about Changes in Types of Farm Enterprises Likely to Be Operating in the County 10 Years in the Future: Most Frequently Mentioned Changes, by Percentage of Total Interviewees Mentioning Them**

County	Most Frequently Mentioned Change	Second Most Frequently Mentioned	Third Most Frequently Mentioned
King ( <i>n</i> = 12)	Increase in number of small operations (75%)	Increase in farms producing for niche markets (e.g., organic, goats, sheep, vegetables, fruits) (42%)	More hobby farms (17%)
Sonoma ( <i>n</i> = 10)	More small farms (60%)	Also, more farm consolidations (30%)	
Lancaster ( <i>n</i> = 19)	More farm consolidations (e.g., corn and soybean farms absorb others) (68%)	More small operations (37%)	More hobby farms (16%)
Dakota ( <i>n</i> = 12)	More farm consolidations (33%)	More small farms (25%)	
Dane ( <i>n</i> = 14)	More consolidations (64%)	More small farms (50%)	More farms for niche markets (29%)
Madison ( <i>n</i> = 14)	More consolidations (80%)	More small farm (36%)	
Carroll ( <i>n</i> = 10)	More small farms (60)	More farms for niche markets (e.g., u-pick, grapes, nursery, custom beef and pork) (40%)	More large farms (40%)
Berks ( <i>n</i> = 14)	More consolidations (e.g., dairy, hogs) (71%)	More smaller operations (e.g., fruits and vegetables, hay, potatoes) (71%)	More farms for niche markets (57%)
Burlington ( <i>n</i> = 12)	More operations oriented toward the growing population (nursery, sod, vegetables, horses) (67%)	More farm consolidations (25%)	
Orange ( <i>n</i> = 13)	More farms for niche markets (e.g., nursery, ethnic vegetables, organics, goats, sheep, cheese, specialty herbs) (62%)	Horse farms for growing upscale population (31%)	
Larimer ( <i>n</i> = 20)	More small farms (100%)	More hobby farms (55%)	More farms for niche markets (20%)
Fayette ( <i>n</i> = 21)	More consolidations (33%)	More small farms (19%)	

\*Included in this table are only the counties where at least 10 local leaders answered the question about expected changes. Percentage entries per county may sum to more than 100% because the same interviewees may have mentioned more than one kind of change. Also, in some counties, the second or third entry is a subgroup of the first (or second).

## 7. Policy Inferences for Promoting Healthy Agricultural Sectors on the Urban Edge

From this chapter's discussion of predictions by interviewed local leaders and surveyed agland owners in the 15 counties, we derived five main policy inferences that were applicable to the period of our field research—early 2005 to mid-2007. Then came the marked downturn in urban and suburban real estate values and fluctuations in market prices for agricultural products and inputs like fuel. The future policy applicability of these inferences will therefore depend on factors that we now cannot know or weigh. However, this chapter has emphasized findings about causal relationships, many or most of which do not completely disappear. Rather, the scope and strength of their influence varies over time.

### ***Local Governments Help to Prevent or Resolve Conflicts between Farmers and Non-farmer Neighbors***

Regarding *what causes owners to plan to convert their land out of agricultural use*, we found in four counties that respondents were *more* likely to develop if they thought that their local government sided with non-farmers in conflicts between them and farmers and that they were *less* likely to have any plans for conversion if they believed the opposite (Table 5.3).

The same type of relationship emerged from the analyses for three counties about whether operators planned to stay farming in the county for another 10 years (Table 5.5). And we found it also in six counties when identifying predictors of whether surveyed agland owners held positive opinions about the future of agriculture in the county 20 years hence (Table 5.6). In all, perceptions of how local authorities handled conflicts between farmers and non-farmers made a difference for one or more of these three expectations or opinions in a total of 10 separate counties out of the 15. The obvious policy inference is that, if local authorities try their best to be even-handed or pro-farmer, they may shape behaviors conducive to healthy agricultural sectors.

Such efforts may of course also settle problems that have already arisen and discourage neighbors from making complaints in the first place. Since this policy stance is likely to become politically less feasible as more non-farmers populate the landscape and the voter registration rolls, effective land-use controls can help by minimizing the building of new homes for non-farmers in agricultural areas.

### ***Land-use Controls***

#### **a. Local Governments Practice Effective Agricultural Zoning.**

Owners in six counties were *less* likely to plan for development of their agland if they evaluated local zoning to be effective in “maintaining an adequate supply of land for agriculture in the county.” In six counties also, believing that their zoning was successful in that same respect was associated with the surveyed owner-operators being *more* likely to expect to remain farming in the county for another 10 years. Yet again in six counties, respondents were *more* likely to be positive *about the future of agriculture in their county* if they thought that zoning helped to maintain an adequate supply of land for farming. Evaluations of local zoning appeared to shape one or more of these three types of attitudes in a total of 12 of the 15 studied counties. Then there were the interviewed leaders in five counties who argued that effective enforcement was necessary to the continued viability of their ag sectors.

#### **b. State Governments Enable, and Local Authorities Operate, Effective Programs for Purchasing Development Rights to Farmland.**

In a total of six counties, affirmative opinions about purchase of development rights (PDR) were associated with respondents being *less* likely to plan to convert any of their land out of ag use and/or *more* likely to continue farming in the county for at least 10 years.

#### **c. Encouraging Intergenerational Transfer of Farm Resources**

Regarding conditions that encouraged owner-operators *to plan to invest in farm buildings*, the likelihood of such plans *increased* in six counties if a son, daughter, or grandchild was lined up to succeed the surveyed operator. The same kind of relationship was found in eight counties during our search for the determinants of *plans to stay in farming or ranching in the county for at*

*least 10 years.* Also regarding the conditions for encouraging *hard-working young people with agricultural backgrounds to farm in the county*, we found many interviewed leaders arguing that membership in local farm families was indispensable to young people's success. Among the desirable and perhaps essential forms of family assistance were gifts of land, discounted prices for purchasing or renting agland, sharing information from the "grapevine" about when land comes up for sale or lease, sharing of equipment, and mentoring in farm management.

The findings summarized in the previous paragraph suggest a need to provide public agencies (like Cooperative Extension) and private organizations (like FarmLink) with the resources to facilitate intergenerational transfer or sharing of farm resources (including management knowledge). It may be a challenging objective. In our interviews we heard about sons who changed their minds after promising to take over the farm, about parents wanting to give the farm to one son but hard-pressed to compensate the other two or three of their children who did not wish to farm, and about a successful farmer with two children neither of whom—he concluded—was suited to head the family farm operation.

Chapter 4 has information on programs (FarmLink, University of Wisconsin's School for Beginning Dairy and Livestock Farmers) that could help with transfers from retiring farmers to nonfamily members. However, as seen above, our interviewed experts emphasized intra-family succession.

### ***Encouraging Farm Enterprises That Are Likely to be Profitable on the Urban Edge***

Once a young person is persuaded to try farming in an urbanizing county, what types of farm enterprises should he/she be encouraged to operate (at least given the conditions we studied in 2005–2007)? With the diversity of the 15 study counties, it is not surprising that no one recipe was appropriate for all or most. Where soils, rainfall, and/or other geographic features give the county's agriculture a comparative advantage, our interviewed experts urged young farmers to raise the advantaged products. Growing wine grapes was promising in Sonoma County, as was working up the management ladder in a thoroughbred horse farm in Fayette County and raising corn and soybeans in DeKalb County. Relative smallness in total acres may make sense given the pervasive land constraint. Among our total of 1,237 surveyed agland owners who also were operators, 199 were 44 years old or younger. And among those 199, a quarter of them farmed (owned and/or rented) no more than 12 acres (the 25th percentile) and half farmed 41 acres or less.

In the interview segments about whether to urge young people to farm in the county, 16% of the total ag leaders giving input on this issue recommended direct marketing. One commonly given reason was that, compared to wholesaling, the net income from smaller landholdings could be larger if food, flowers, and other products were sold directly to urban and suburban consumers. Among our 199 young or relatively young surveyed owner-operators, 26% did some kind of direct marketing.

### ***Overcoming Labor Shortages***

Omitted from this discussion of assistance to beginning farmers are of course conditions that affect the viability of more mature farm operations, particularly the labor constraint that was explored in Chapter 4. For example, across the 15 counties, from 47% to 79% of the surveyed

owners reported using nonfamily labor, but the median value of those satisfied with the supply was only 53%. Policy makers need to consider ways to improve the quantity of farm workers, their productivity, or the availability of effective mechanical substitutes. One solution that interviewed experts offered for the quantity problem was to make the federal guest worker program more effective in getting sufficient help to farms when needed.

***Encouraging Metro-area Farmers to Adapt to Reduced Aggregate Demand in Their Localities for Agri-service Dealers***

Chapter 4 presented also our interview findings about how both agri-service businesses and their farmer customers in metro areas responded to the closing of many local dealerships. While the dealers remaining in one or two counties away developed effective delivery programs, farm operators learned how to use the Internet to order supplies and how to do some of their own equipment repairs and to meet other service demands. If need be, Cooperative Extension or other public agencies could encourage these necessary adaptations, such as with information brochures and workshops.