The Suitability, Viability, Needs, and Economic Future of Pierce County Agriculture

Phase I Report Responding to Questions Posed by Pierce County Council Resolution R2004-105s

August 31, 2004
I. Background for this report:
Resolution R2004-105s of the Pierce County Council, passed on July 27, 2004, sought the answers to a number of questions pertaining to the economic and other sustainability of Pierce County Agriculture. The Resolution called for initial “Phase I” responses, by August 31, 2004, to certain of the more easily answered questions and for a description of the costs, data needs, and time-line for more complete answers to the more difficult Phase II questions.

Pursuant to R2004-105s, American Farmland Trust (AFT) was asked to complete a report with initial answers to Phase I questions and to develop a proposal for answering Phase II questions. This report, completed in accordance with that request, was compiled by AFT personnel with the cooperation and assistance of Pierce County Planning and Land Use Services, the Pierce County Farm Advisory Commission, WSU Research Extension, Puyallup and the WSU Small Farms Program, the Puyallup NRCS Field Office and the Pierce Conservation District, as well as of the many individual farmers, specialists, and organizations mentioned as “resources” below.

Resolution R2004-105s is attached as Exhibit A to this report. The list of questions to be addressed in Phase I and the outlines of this initial project are set forth in Exhibit B “Phase I Responses for Pierce County Agriculture Issues.” The Resolution question numbers referred to in this report are based on Exhibit B.

II. Approach and Organization:
For convenience in reading and answering the questions and addressing the issues included in this Phase I project, this report is organized by subject-matter as follows:

A. Suitability, protectability, and reclaimability of Pierce County farm soils
   (Questions 1, 2, & 3)
B. Economic viability of Pierce County agriculture
   (Questions 5, 11, & 12)
C. Needs and strategies to support and protect agriculture
   (Question 6 and parts of questions 5 & 12)
D. A strategic plan for economic development for Pierce County agriculture
   (Data needs, time line, cost, and a proposal for answers to Phase II questions)

III. Summary:
Pierce County provides excellent climate and soil conditions for successful agriculture. But growing urbanization and fragmentation of the agricultural land base is forcing the local agriculture industry to change. Pierce County agriculture is in transition – moving away from the traditional industrial, wholesale model of agricultural business and toward a more intensive, value-added, direct market urban edge model. This approach holds great promise for a successful future for local agriculture. But the agriculture industry needs help in fulfilling this promise. Completion of an economic development strategic plan for agriculture in Pierce County would provide strong and useful answers to important questions posed by Resolution R2004-105s while offering immediate support to this important local industry.
IV. Phase I Questions and Answers:

A. **Suitability, protectability, and reclaimability of Pierce County farm soils**

(Question 1: If land lies fallow for long periods of time, does it lose agricultural productivity through erosion, etc? Does it vary depending on the soil type? Question 2: If the critical soil type is deep, how does development reduce the long-term agricultural productivity of the land, assuming that the development can be removed and the land reclaimed for farming? What is the cost of reclamation? Question 3: Do the different soil types have differing economic values? Does it depend on what produce grows best on what soils? Is the “best” produce grown on a given soil type marketable in our area and in our economy? If not, does this reduce the value of preserving that land?)

**Loss of soil productivity:**
Soil does not lose agricultural productivity by reason of lying fallow for long periods of time. In fact one of the techniques used by farmers to increase the long-term productivity of their soil is to allow it to lie fallow, or to “rest,” with some soil enhancing cover crop between “money” crops. Productive topsoil is a complex, self-sustaining biological system of organisms and nutrients that supports the growing of crops. Its overuse, without taking management measures to protect and restore its vitality, can diminish its productivity. Allowing it to lie fallow does not.

Farmland that is neglected, of course, is likely to grow unwanted vegetation, noxious weeds, brush, trees and other plants. The weeds, in particular, can be a nuisance to surrounding landowners. In order to restart a farming operation on this land this vegetation must be removed, the weeds subdued, and the topsoil tilled and reconditioned for planting. The difficulty and expense associated with this depends on how long the land has remained out of tillage. After only a few years, the cost is low. After many decades or a century, where large conifers or other trees are established, the cost would be higher although, if the trees were large enough, their value as timber might more than offset the cost of rehabilitation. Clearing and preparing raw, undeveloped land for agriculture is still not uncommon today and is economically viable. If the land is in established agricultural grasses before it is left in neglect, it will remain stable for a much longer period and its later recovery for agriculture will be much less expensive.

Soils that lie on highly erodable hillsides or soils composed of light particulates and located in areas beset with strong winds can be vulnerable to erosion. Because agricultural lands in Pierce County are generally flat, winds are generally light, and soils are not particularly vulnerable, Pierce Count farmlands are largely not prone to erosion. Land that is not tilled and that has become covered in some type of plant growth that holds the soil in place is generally not vulnerable to erosion even in areas where conditions are more troublesome. In Pierce County there is very little erosion-vulnerable land that is in agriculture and none that is classed as vulnerable or “highly erodable” under NRCS standards.

For the soils on Pierce County’s river valley bottoms, the issue is more likely to be inundation with surface waters and potential transformation, through neglect, into unfarmable wetlands. This may happen even where these lands were not, historically, wetlands. Most farm drainage systems tend to be pretty self-sustaining, even when neglected. Existing underground tile systems will continue to work over long periods without attention. Ditches and outlets can, however, become clogged if they are neglected.

---

**American Farmland Trust**
**Solving the Land that Sustains Us**
Farmlands that are located in our river valleys below or near surrounding areas that are experiencing population growth and development tend to see a steady increase in surface water needing drainage as the expansion of impervious surfaces in the surrounding development outpaces mitigation requirements. This is a growing problem throughout Western Washington. Farmers in these lowland areas incur rising operating expense to constantly adapt their management and to maintain and improve their drainage systems. This is why, as net receivers of surface water drainage, farmers often indicate frustration with being required to pay surface water management fees from which they receive no benefit. Inundation could be a problem for neglected valley farmland.

Reclaiming farmland:
Soil is typically referred to in layers. The topmost layer (usually only a few inches of high quality, biologically active soil) is referred to as the “A” horizon. This is the soil layer from which plants draw the nutrients they need to live. The second layer is referred to as the “B” horizon. It generally has very little biological activity and little or no nutrient value for plants. But because the “B” horizon soil is not compacted onto a solid, unmanageable state and can be penetrated by plant roots, this layer provides root stability for larger plants and a source of water to deeper roots. The “C” horizon which lies even deeper is usually heavily compacted, has very little biological activity and no real value for plant growth. The depth of the “A” and “B” horizon soil is generally what limits the depth to which plant roots can grow. The term “soil” is sometimes used to refer to the “A” and “B” horizons. The term “topsoil” usually refers to the “A” horizon only. Soil depths in Pierce County’s river valleys can be 40” to 60”. Topsoil can, in very unusual circumstances, be up to 17” in depth in our area, but the typical or average range in our local river valleys is between 8” - 12”. Up out of the valleys, soil and topsoil depth is a great deal less.

The first step for most development on farmland is the removal of the topsoil before construction. Topsoil is extremely valuable ($25 per yard is a typical retail price in this area for high quality topsoil). The usual practice is to remove the topsoil, push it to the side of a development site, then, when construction is complete, reuse whatever thin layer is needed for landscaping, and sell the balance. Unless it is safely pushed aside during construction, construction activities are likely to mix it with “B” horizon soils and greatly diminish its value. Topsoil is also not usually a stable surface upon which construction or pavement can be placed – so it is removed for that reason as well.

If structures or pavement are placed upon and cover existing topsoil, they remove water, light, oxygen, and other values critical to the continuation of the life system of the topsoil. This destroys its biological functioning, killing the microbes and organisms that give the soil life. The effect is not dependant upon depth of topsoil. Once the biological system that makes up good topsoil has been killed, it takes centuries for it to recover naturally. It is estimated that it takes 500 years for nature to create one inch of topsoil. Reclaiming farmland from development, therefore, will nearly always require full replacement of the topsoil no matter how that development has occurred.

Development also tends to destroy the “B” horizon soil. Construction activities, the structures placed upon the land, the pavement, and the human activities (vehicles, machinery, intensified
pedestrian & recreational traffic, etc.) conducted there over the years, all have the effect of severely compacting the soil beneath. The effect is to essentially convert a “B” horizon (or any remaining “A” horizon) soils into a “C” horizon and to eliminate tillable soils entirely. Reclaiming farmland from development, therefore, also requires extensive ripping and loosening of the soil. And, with current technology, this can only be practically done to a depth of 20”–24” – not to the original depth of 40” – 60”. So, even with ripping, full reclamation is probably not practicable although, of course, given enough money, this barrier might also be overcome.

The cost of reclaiming farmland from development will obviously vary. Cost elements include: demolishing structures and their foundations, breaking up pavement, removing subsurface utilities, removing debris, backfilling and re-grading the land, ripping the “B” horizon, replacing topsoil, replacing structures needed for agricultural operations – barns, fencing, farm buildings. At today’s prices and using estimates provided by three Tacoma area contractors, one can propose what might be a possible reclamation scenario involving the removal of 250 single family homes from 50 acres of land and look at some of the cost elements that would be involved in its restoration to agriculture:

1. Demolition and removal of debris: Assume that the average home in our project is a 2,500 square foot, one story, wood frame, single family dwelling (garage included) on relatively flat land. The cost of demolition, capping sewer, removal of the foundation, and backfilling the depression would typically average about $4.25 per square foot for a total demolition cost of: $10,625 per home x 250 homes = $2,656,250.

2. Driveway pavement: Assume the average driveway area is 750 sq. ft. (15’ x 50’) paved in asphalt to a depth of 4”. The cost of break-up and removal typically averages about $2/sq ft – also assuming that the contract is for several driveways. Thus, driveway removal for each home would cost approximately $1,500 x 250 homes = $375,000.

3. Public roadways: Assume our 50 acre site contained 10,000 lineal feet of public roadway paved with asphalt to a width of 30 feet for a total area of 300,000 sq. ft. The cost of removal of 6” - 8” depth asphalt (typical for public roads) would be at least $2.50/sq ft = $750,000.

4. Topsoil replacement: Assume topsoil could be replaced at a “large project” rate of $20/sq. yd. to a depth of 10” (or .833 ft.). This is 4,033 sq. yards per-acre x 50 acres = 201,650 yards of topsoil x $20/yd. = $4,033,000.

   Basic reclamation cost: $7,814,250

5. Land acquisition: Perhaps most significantly, the above calculations do not consider the cost of land acquisition. Assuming 250 homes at an average price of $200,000 each, the price on such an acquisition is $50 million.

   Total reclamation project: $57,814,250 ($1,156,285/acre)

These figures are, of course, at today’s prices. So using them, even for comparison, assumes land values in developed areas rose at a rate matching inflation – which is, of course, contrary to our experience. These estimates would also be much higher for more substantial types of development. Removal of concrete paving, for example, is considerably more expensive than removal of asphalt. And, while some cost benefit might be obtained if it were possible to do such a project under a single very large contract, keep in mind that the above figures do not yet include costs to remove subsurface utilities, to restore agricultural drainage, to construct farm-appropriate structures, to “rip” the compacted “B” horizon soil to a farmable consistency (assuming this is even possible) or to otherwise prepare this location for renewed agriculture.
The yet more intractable (and probably the ultimate) question is whether such an acquisition would even be possible. 150 individual property owners in a 50-acre contiguous area of farmable land are highly unlikely to all agree, together, to sell out at the same time. Without the use of eminent domain, there would need to be some highly unusual circumstance to make this a logical scenario.

Soil types & economic values:
Agricultural soils are categorized by the USDA/Natural Resources Conservation Service (NRCS) in a variety of ways – most often by their organic composition (referred to as soil “type”) and by their agricultural productivity (referred to as “capability class” or just “class”). There are 8 overall capability classes. Capability class is, by far the most relevant classification related to crop production and economic value. How a given soil is rated for class is determined by its overall score when graded on a number of specific measures of agricultural capability such as: slope, erodability, rooting depth, drainage, water table depth, flood hazard, texture, salinity, sodicity, available water capacity, precipitation, growing season, temperature regime, etc.

We have soils falling into many of these 8 classes in Pierce County. Class I soils are very rare at any location. The soils most common in our Pierce County river valley bottoms in their current farmed condition are class II and III soils, considered to be excellent growing soils. These soils, at the typical depths we have in these areas, make these lands particularly valuable for agriculture for the reason that they are capable of successfully and profitably growing a very wide variety of crops.

Nationwide, agricultural land values tend to be somewhat similar – there is an established market for agricultural lands, both by purchase and by lease. While prices do vary from place to place, the value is ultimately tied to soil class and driven by the global marketplace into which agricultural products are sold. Agricultural land values cover a wide range depending on the class of the soil. One might pay $150 per-acre for range land, $250 per-acre for non-irrigated wheat land, $2-4,000 per-acre for good vegetable crop land, and even $10,000 per-acre for specialized wine grape land. But these differences (with, perhaps the exception of the grapes) probably depend not on what particular crop can be grown, but rather on the overall class quality of the soil. The relationship between the success of certain particular crops and the soil is very general and much more tied to soil class than to soil type. For example, cattle ranching does not require soils of the quality needed to grow vegetables. Grass and hay can be grown where row crops would never succeed. Tree fruit does not usually require a high quality soil, but it does require some fairly specific climactic conditions. Most of the vegetables, berries, tree crops, nursery stock, and other highly diverse products grown in Pierce County benefit greatly from the high quality, class II and III soils we have here. But these crops are not really soil type specific.

In other words, the significant issue for the agricultural value of land is usually the general quality of the soil, not its particular type. If the soil is of good quality, it will, by definition, grow almost any crop. If it is not, it may not. Soil type is of only marginal significance in this. Professionals in the agriculture community do acknowledge that, in some very limited circumstances, some particular soil types that are also of high quality might be said to be particularly good for growing some specific or particular crop. But this is a rare circumstance
and not of general economic significance in the agriculture industry. So there is no real issue of there being only certain crops that will grow in Pierce County. And, thus, there is no particular issue about there being a need for a strong market for those particular crops – since our quality soils will grow a very wide diversity of crops quite successfully.

This said, however, there is one other issue that needs mention. While the NRCS soil capability class system described above incorporates local climate, this system will not, necessarily, capture the idiosyncrasies of small climate differences within Pierce County. For climate purposes, most of our local area is officially classed together. Yet we know that the growing season and particular climate conditions on the Enumclaw Plateau, for example, will be different from conditions in the Puyallup Valley. Farmers working these different areas will experience some differences in farming conditions which could have a bearing on their operations. Overall, however, soil capability “class” remains the best and most relevant measure of the agricultural productivity of soils, both generally and for specific crops.

Resources:
- USDA has an excellent soils website at: http://soils.usda.gov. They also publish an excellent basic educational pamphlet on soils called “From the Surface Down” also located on line at: ftp://ftp-fc.scegov.usda.gov/NSSC/Educational_Resources/surdown.pdf
- The NRCS soils webpage contains considerable information on the issues of protecting urban soils during construction and on urban soils issues at: http://soils.usda.gov/sqi/soil_quality/land_management/urban.html. In particular, their publication "Protecting Urban Soil Quality" listed there, illustrates the difficulties of protecting soil during construction.
- An interesting article on issues associated with reclaiming fallow land can be found at: http://ressources.ciheam.org/om/pdf/a15/92605082.pdf, “Advantages and Possibilities of Recultivating Fallow Land in Accordance with Natural Succession (M. E. Jochmisen)
- NRCS publishes a booklet on their land-capability classification system that provides more detail on how this system works. It is referred to as: “Land-Capability Classification” [Natural Resources Conservation Service Agricultural Handbook No. 210 – Exhibit 622-2 (430-VI-NSSH, 2001)]. Exhibit C is an NRCS spread-sheet with the criteria for placing soils into capability classes.
- Don Buckloh, AFT Farmland Information Specialist, former NRCS Soil Scientist. AFT Field Programs Office, 1 Short Street, Suite 2, Northampton, MA 01060. dbuckloh@farmland.org, Phone: (413) 586-4593 Ext. 16.
- Chuck Natsuhara, Soil Scientist, NRCS Puyallup Field Service Center, 1011 E. Main St., Suite 106, Puyallup, WA 98372, Phone: (253) 845-9272
- Andy Bary, Senior Scientific Assistant, WSU Puyallup Research Extension, 7612 Pioneer Way East in Puyallup, WA 98371 bary@wsu.edu, Phone: 253-445-4588
- Frank Easter, State Resource Conservationist, USDA/Natural Resources Conservation Service, 316 W. Boone Ave., Suite 450, Spokane, WA 99201-2348, Phone: (509) 323-2961
- Matt Taylor, Estimator, Evergreen Concrete Cutting, 8018 Portland Ave. E., Tacoma, WA, Phone: (253) 538-7225
- Robin, at Del Mar Concrete Cutting, 152 100th St. S., Tacoma, WA, Phone: (253) 537-0109
- Ed Brown, Roadway Construction 1647 Portland Ave, Tacoma, WA 98421, Phone: (253) 593-5007
B. Economic viability of Pierce County agriculture

(Question 5: Is farmland in Pierce County viable for large scale farming? Do we have the soil types, size of parcels, and agricultural support services to handle big agriculture? If we’re depending on small scale agriculture, is it realistic to assume all of the thousands of acres being preserved will be farmed some day?  

Large scale vs. small scale agriculture:

Large-scale, wholesale oriented, industrial agriculture is not expected to expand significantly in Pierce County. We certainly do have the needed soil types, but we lack the large contiguous parcels of land, the type of food processing and farm support infrastructure, the ability to use industrial farming strategies (aerial spraying, for example) to make such farming viable. Instability in agricultural zoning helps cause farmland prices to rise above a level that can be sustained by low-intensity, wholesale market, industrial farming. And the surrounding pressures of growth and the fragmentation of the land base through encroachments by inconsistent residential and commercial activities all make such farming increasingly difficult.

Taking the place of large-scale wholesale agriculture, however, Pierce County is experiencing an influx of small, more intensive, direct-market farming operations that are quite profitable and are likely to sustain themselves over time, especially given some encouragement and protection from the public sector. This transformation is currently incomplete. We still have many farmers struggling, with limited success, to compete at low intensity wholesale agriculture. At the same time, we have numerous examples of farms that have found ways to take advantage of the proximity of their marketplace to avoid the wholesale trap, to greatly increase their per-acre return, to provide values to their customers that are not to be found in nearby supermarkets, and to use alternative crop selection, crop production, marketing, distribution, and value-added strategies that greatly increase their profitability.

Such “success stories” are no longer just anecdotal. They are increasingly common throughout our ever-more-populous Puget Sound area, including here in Pierce County. For example:

- A small local berry farm that has added on-site processing of specialty jams and jellies to its activities, created its own label, and is marketing its products on-site, through local product internet sales, and by word-of-mouth.
- An ag-tourism farm that provides farm-fun for the whole family as well as an on-farm, fresh produce purchasing opportunity. It combines a “road-side” on-farm store selling local products and seasonal sales of the farm’s produce, “U-pick” opportunities (such as pumpkins at Halloween), hay rides, a “corn maze,” and other enticements and entertainments.
- An organic community supported agriculture (CSA) farm with several hundred regular subscribers who purchase a seasonal share of the farm’s diverse production which they receive in weekly packages of fresh produce direct from the farm, thus receiving not only the food, but also the direct farm-to-consumer experience.
- A “U-pick” berry farmer that has developed a strong list of regular customers he notifies when the berries are ready and who come to the farm annually, in season, to pick their own berries. This farmer is not technically organic, but he does not use pesticides and he advertises this to his customers. Pickers are free to eat while they pick. Families bring their...
children because they know the farm is safe for the children and the no-pesticide berries can be eaten directly from the vine.

- A “low impact” dairy farmer who has created an exclusive, direct contract relationship with a local specialty cheese producer. While not “organic” this farmer uses a regime of low environmental impact strategies to produce a healthful milk product that is especially valued by his cheese contract-buyer. His farm and his farming system are, in turn, advertised by the cheese producer to its health, quality, and environmentally conscious customers creating a price premium for both farmer and cheese-maker.

- A small pear farmer who sells his pears under a special label to the Asian community and who has diversified his crops to include several unusual varieties of fruits and vegetables in demand in local ethnic and specialty markets. He also direct-markets his pears and other products to consumers through several of our highly successful local farmers markets and in a variety of ways. He points to two basic strategies: 1) Flexibility in what you grow – research the marketplace and grow what the market wants; and, 2) Fill the increasingly substantial voids in the marketplace that are not well served by the current mass-market system.

- An organic farmer who sells exclusively at farmers markets (like the new Puyallup Farmers Market Pavilion completed just this year) and in direct on-farm sales and whose farm production and profitability has soared since moving to direct-sales organic agriculture.

- A pig farmer who pre-sells piglets to her customers at a price which includes training on the keeping and raising of pigs (about which there is much to know). She has found an ever-growing marketplace among small rural landowners who want to share the rural life but lack the time or the land to engage in agriculture themselves.

- A cattle producer who sells live miniature cattle (a special breed) to small rural landowners who lack the space, facilities, or ability to cope with a larger animal.

- A farmer-major farm stand owner who is using his purchaser relationship with other local farmers to create a farm products supply-stream that is strong enough to allow him to sell local produce to large chain supermarkets and distributors in the area. This enterprise could work to the advantage both of this farmer and of the smaller farmers who sell to him.

- A farmer who, like a CSA farm, takes subscriptions for production but who also provides a home delivery service as a part of his operation. His customers receive, on their doorstep, a weekly delivery of a diverse selection of fresh, high quality seasonal local produce. He caters to families that want quality food but who are too busy to shop and who appreciate the convenience of quality products delivered direct. Some of his products come from his own farm, some from other farms in the area. He estimates that there are 4-5,000 families now receiving deliveries of this kind in the Pierce, King, & Snohomish County area.

- A mid-sized farm operation (large by Western Washington standards) that is producing a diverse suite of products but at volumes and at a level of quality allowing them to market directly to distribution centers and at the highest possible prices. Products that are not profitable are quickly dropped. There are some direct sales at a roadside stand and they are considering a CSA operation. But the focus of their success is being super-conscious of price, quality, and market demand and delivering what the market wants in the form needed at a premium.

- A “U cut” and direct market Christmas tree operation that has made a specialty of keeping and serving its return customers – mostly families that come each year to enjoy a season tradition of cutting their own tree.
All of the above examples are from King, Pierce and Snohomish Counties - most from Pierce County. There are many more iterations of each of these examples on similar themes. These farmers are succeeding, today, even without a number of the needed changes and additions to the support local governments can provide to local agriculture – support that would open the door for such opportunities for a great many more farmers in the future.

Dr. Marci Ostram, Director of the Small Farms Program with WSUs Center for Sustaining Agriculture and Natural Resources, has recently conducted surveys, statewide, to determine the extent to which farmers, on average, are taking advantage of direct marketing to enhance their businesses. The results are quite surprising with some 62% of all farmers statewide indicating that they believe direct marketing is an effective way to keep farming viable. (See Exhibit J.) Dr. Ostram’s surveys have also demonstrated substantial and growing consumer interest in direct purchases of farm products. (See Exhibit K.) So this movement by Pierce County farmers is supported by both statewide trends and by the changing marketplace.

One further measure of the economic sustainability of agriculture in Pierce County would be the existence of a market demand for protected farmland. Unfortunately, the sometimes flexibility of our zoning laws, the past lack of a strong purchase of development rights program, and the past and ongoing fragmentation of our local agricultural land base has often allowed the market price of farmland to rise above its agricultural value. Determination to maintain a strong and fair zoning code and significant funding for a purchase of development rights program would help keep agricultural land available to farmers in Pierce County at its agricultural market value.

There is, however, substantial demand for farmland at its agricultural price. One illustration of this demand is the backlog of new farmers seeking land for agriculture who cannot find it. A Western Washington-based organization, Cascade Harvest Coalition, operates a program called FarmLink which seeks to make matches between farmers who are retiring from agriculture and new entrants wishing to farm. The FarmLink program now has a current list of 116 prospective new farmers who at the present time wish to buy or lease farmland but who, at least so far, have been unable to find it available in this area at an agricultural price. Obviously, this is one of the issues that will need to be addressed if Pierce County agriculture is to be able to realize its potentially bright future.

Economic statistics on Pierce County agriculture:
As mentioned above, Pierce County agriculture is changing from an industrial, low intensity, mass production, wholesale market model to a more specialized, high intensity, direct market model. This transformation is clearly reflected in Pierce County’s agricultural statistics – particularly in the growing differences between Pierce County farms and farms in sister counties elsewhere in Washington and in Oregon. For example:

- Pierce County is 26th of 39 counties in Washington in total land devoted to agriculture. But it is only 16th (and rising) in the value of its agricultural products sold. This reflects the increasingly intensive agriculture in this county producing much more dollar value per-acre than is produced elsewhere in the state.
- The average per-acre dollar value of annual farm production in Pierce County is $1,638 nearly 5 times the statewide Washington average of $348 and nearly 9 times the statewide
Oregon average of only $187. Clearly, Pierce County farmers extract high dollar value for themselves and high food value for their customers out of every acre they farm.

- Also illustrative of the intensive farming here is the investment farmers make in farmland, buildings, and farm equipment. The average investment by Pierce County Farmers in land and buildings is $9,655 per acre, well over 6 times as much as farmers average statewide. And the average per-acre investment by Pierce County Farmers in machinery and equipment is $890, nearly 5 times as much as farmers average statewide.

- Pierce County has seen significant growth in the market value of its farm production. Between 1997 and 2002, the market value of production of an average Pierce County farmer grew from $47,564 to $63,887 – an increase of 34%. Over the same time period, the market value of production of an average (statewide) Washington farmer grew from $123,349 to $148,327, an increase of 20%. And in Oregon, the average market value of production went from $75,967 to 79,822 – an increase of only 5%. This is an illustration of the shift under way toward more intensive agriculture, more value-added activities, and increased direct marketing generally.

- Statewide in Washington, agriculture is not the primary occupation for 47% of our farmers (compared with 42% nationwide). In Pierce County, agriculture is not the primary occupation for 42% of our farmers, matching the national average. For comparison, Yakima County is 37% and Grant County is 39%. (These are the two most powerful agriculture counties in Washington.)

- Pierce County farms average only a little over one-half of the net cash income received by farms on average, statewide. Average per farm net cash income in Pierce County is: $16,308. Average statewide is: $32,108. (Note that more of our farmers are part-time and that the local non-farm job market is much stronger and higher-paying than on the East side.)

- In connection with the above item, note that Pierce County farms receive less than 1/3 of the government payments received on average statewide. Average per farm government payments received in Pierce County is $6,058. Average statewide is $18,422. This is not surprising since most of the government payments involved are so-called “commodity price support” payments and go to farmers growing certain “commodity crops” that are almost entirely grown for industrial, wholesale markets.

- Pierce County competes well in production and acreage for a number of specific products. For example, our rank among Washington’s 39 counties for:
  - The value of farm product sales:
    - 1st in lettuce (’97 Census);
    - 3rd in strawberries; 5th in raspberries (’97 Census);
    - 4th in horses, ponies, mules, burros, and donkeys;
    - 7th in nursery, greenhouse, floriculture, and sod;
    - 9th in livestock, poultry and their products;
    - 9th in vegetables, melons, potatoes, and sweet potatoes;
    - 11th in milk and other dairy products from cows;
    - 14th in sheep, goats, and their products;
    - 16th for total value of all agricultural products sold.
  - Livestock inventory:
    - 3rd in poultry layers 20 weeks and older;
    - 6th in horses and ponies
    - 7th in broilers and other meat-type chickens;
Acreage in crops:
- 1st in rhubarb (also 1st in the U.S.)
- 9th in cut Christmas trees;
- 10th in all vegetables;
- 11th in sweet corn.

The above agricultural productivity occurs despite the fact that, with over 700,000 residents, Pierce County is the second most populous county in the State of Washington.

To some extent, these numbers do not reflect a reality that has been visited on American agriculture since the fall of the Berlin Wall and the acceleration of globalization over the past 15 years. In the past, American farmers met low cost overseas competition by industrializing their farming operations. Our strategy was to take advantage of low cost American capital to invest heavily, to mechanize our operations to reduce the use of expensive physical labor and use more efficiently the more educated workers available to us, and to take advantage of our superior technology and infrastructure. With globalization, these strategies no longer seem to be working. Our differential advantages over many 2nd and 3rd world countries are slipping away. And large-scale American agriculture is in trouble.

That is why the new strategies and business models listed above have become so important and such an opportunity in Pierce County. For all the advantages of farming in Eastern Washington, farmers there suffer at least one significant disadvantage – lack of nearby access to urban markets. The many successful farmers doing business in Pierce County have one thing in common: They are NOT competing with Eastern Washington and Oregon agriculture. Instead, they are finding ways to take advantage of the special opportunities created by their proximity to the urban marketplace. They are capitalizing on increasing consumer awareness and concern about food safety, food quality, and the environment. They are responding to a rising public dissatisfaction with their alienation from the sources of their food. And many of them are making money – sometimes much more money with a lower overall investment (even though their farms are smaller in acreage) than their Eastern Washington counterparts.

Unfortunately, however, this is not the whole story. There are also a great many farmers in Pierce County who still struggle to survive using an Eastern Washington business model. For them, each year becomes more difficult as their processors and suppliers leave, their residential neighbors increasingly complain about their farming activities, dogs harass their livestock, vandals damage and pilfer their crops, non-farm traffic makes it impossible to move equipment from field to field, land and labor prices rise, and corporate consolidation and a global marketplace steadily drive down their prices. These farmers, too, are averaged in to the statistics outlined above. And many of them are not doing well.

Their situation is not entirely of their own making. By not protecting their land, we allow it to be fragmented up by inconsistent uses and to be bid up in price beyond what farm businesses can afford to pay. By applying a whole suite of regulations (very often ones that were initially created out of needs generated by non-farm activities and not designed with farmers in mind) we make it difficult for them to engage in new activities and to change their business models in new and creative ways. By failing to financially recognize and pay for the environmental and other critically important community values that these farms produce in addition to the crops they
grow, we drive them from business and thereby increase those expensive environmental burdens on the farmers who remain – as well as on the public generally. Due to the rapidly changing marketplace, these small businesses are in need of and can greatly benefit from the economic development support that provides the direction, ideas, and opportunities they need to work their way to success in this new market. So Pierce County farmers do need financial and other support – but only to the extent that the public receives full value in exchange. (See sections C & D, below.)

In completing this report, we interviewed one very successful local farmer who mentioned the cynical old comment sometimes made by restaurant diners waiting for their dinner to be served. The impatient customer says: “Yeah, they had to go out and pick the vegetables.” My farmer told me that one of his market strategies is to make vegetables available to “high-end” restaurants on very short notice. His farm is within a ½ hour drive of downtown Seattle. He can, literally, get a call, pick the product, and have it in the chef’s hands and on a diner’s table within an hour of harvest. There are restaurants that will pay for this kind of freshness and service. Sensitivity and access to a lucrative marketplace provides Pierce County farmers with a real future. It may not be exactly the kind of future all farmers expected. But it certainly is a future that will make profitable use of any agricultural lands we can preserve and that will need the continuing support and protection of the Pierce County community.

Resources:
- See Exhibit D for a compilation of relevant Pierce County agriculture statistics
  - County level data is located at: http://www.nass.usda.gov/census/census02/volume1/wa/index2.htm, especially see:
    - Table 1, County Summary Highlights
    - Table 2, Market Value of Agricultural Products Sold
    - Table 4, Net Cash Farm Income of the Operations and Operators
    - Table 6, Income from Farm Related Sources
    - Appendix A, General Explanation
  - State level data is located at: http://www.nass.usda.gov/census/census02/volume1/wa/index1.htm
  - Profiles and a summary for each state and each county are located at: http://www.nass.usda.gov/census/census02/profiles/wa/index.htm with Washington at: http://www.nass.usda.gov/census/census02/profiles/wa/cp99053.PDF and Pierce County at: http://www.nass.usda.gov/census/census02/profiles/wa/cp53053.PDF.
- The profiles of Washington, Pierce County, and Oregon agriculture are attached as Exhibits E, F, & G.
- Exhibit H is a 1997 Census of Agriculture table profiling the rank of Pierce County within the State of Washington and in the U.S.
- Exhibit I is a recent (8/19/04) cover story from the Pacific Northwest Magazine, Seattle Times, “Nurturing a Niche” that discusses some of the new ways local farmers are turning a profit in what has come to be known as the “new agriculture.”
Economic Viability of Pierce County Agriculture – Phase I

- **Exhibit J & K** are research briefs from the WSU Center for Sustaining Agriculture and Natural Resources on the current use of direct marketing by farmers and direct purchasing by consumers.

- **Wade Bennett**, Rockridge Orchards, 41127 - 212th Ave. SE. City: Enumclaw. Phone: 360-825-1962

- **Dick Carkner**, PhD, Chair, Pierce County Farm Advisory Commission, Professor of Agricultural Economics, Emeritus, WSU Research Extension, and co-proprietor, Terries Berries, 4520 River Road, Tacoma, WA 98443, Phone: (253) 922-1604

- **Mary Embleton**, Cascade Harvest Coalition, 4649 Sunnyside Ave. N. Rm. 123, Seattle, WA 98103, Phone: 206-632-0606

- **Burr Mosby**, Mosby Bros. Farms, 12754 S.E. Green Valley Rd., Auburn, WA 98092, Phone: (253) 863 9733


C. **Needs and strategies to support and protect agriculture**

(Question 5 [in part]: Is farmland in Pierce County viable for large scale farming? Do we have the soil types, size of parcels, and agricultural support services to handle big agriculture? If we’re depending on small scale agriculture, is it realistic to assume all of the thousands of acres being preserved will be farmed some day? When? Question 6: Is there any evidence or data to support the use of the clustering concept as a means of preserving natural resource lands? Question 12 [in part]: What does the typical revenue/cost balance sheet for local farmers look like? What kinds of financial help do they need, now and in the future? Question 14: Is there any help from the federal government because of competition from Mexico, etc. [NAFTA]?)

What help do farmers need?

Agriculture does need the help and support of the local community if it is to flourish in Pierce County. For example:

1. **Land cost**: An inquiry with the office of the Pierce County Assessor-Treasurer indicates that the vast majority of the land currently in agriculture in Pierce County today has a market value that exceeds its agriculture value. So it is becoming ever harder for farmers to afford the land they need to farm. Pierce County, recently approved conservation district funding that includes a very small sum for a start-up purchase of development rights program. If this program expands to significant levels it could significantly help reduce the cost of land for farmers and help deal with this issue. (See **Exhibit L** for polling results on farmer opinions on land protection.)

2. **Environmental cost**: Recent passage by Pierce County of the conservation district assessment will help provide local funds for technical assistance that are needed to leverage federal cost-share money that will now be more available in the conservation programs listed below. These programs help farmers cover their rising costs of environmental compliance – an ever-increasing need in agriculture. Local cost-share funding is also needed.

3. **Economic development**: Most industries in our community benefit, directly or indirectly, from public programs that do economic development strategic planning. Agriculture, however does not. There are a great many ways in which to greatly expand business opportunity in agriculture if the resources were there to support them. Pierce County, for example, is providing very limited, mostly moral support to the Puget Sound Fresh program, which advertises to local consumers encouraging them to buy local products that benefit...
local producers. More significant support for this program could help consumers appreciate the benefits of buying local and help local farmers.

In each case, more is needed. A successful local agriculture industry will ultimately require the support of a community that is committed to its permanence and success rather than one that implicitly assumes it is only a temporary land use that will ultimately be replaced.

With the support and encouragement of County Executive John Ladenburg, three years ago Pierce County convened a Farm-City Forum including influential citizens from every walk of life and of widely varying perspectives. Out of the discussions of this knowledgeable and diverse group, a series of 12 recommended “work areas” emerged for the enhancement of agriculture and the integration of our farm and urban communities. These work areas included:

- **Building coalitions** between urban and rural groups with similar values and interests: (Since the Forum, a series of outreach meetings all around Pierce County have taken place. An outreach presentation and PowerPoint have been prepared to empower volunteer presenters. A video presentation has been created and is in use. And rural and urban groups are newly working together on several common issues in Pierce County.)
- **Strengthening farmers markets**. (Since the Forum, interest has continued to grow for a farmers market at the transportation center at Freighthouse Square in Tacoma. A new Farmers Market Pavilion has been built and is in use in Puyallup.)
- **Increase local institutional and retail food buying**: (This continues to be a goal of the Pierce Count Farm Advisory Commission.)
- **Improve regulatory coordination for farmers**: (A Pierce County Farm Advisory Commission task force has been working on this issue. Proposed legislation under consideration by the County Council this year is a product of this effort.)
- **Improve urban press on farm issues**: (Efforts by farm advocates have much improved reporting on agriculture issues in Pierce County – a project that is continuing.)
- **Extend Farmlink program services to Pierce County**: (Farmlink is now providing services for Pierce County farmers and residents.)
- **Strengthen the market branding of local Pierce County farm products**: (Some of the examples provided in this report of local farm successes are partly the result of improved branding and brand name recognition in the local marketplace.)
- **Open public lands to agriculture**: (This continues to be a goal of the Pierce County Farm Advisory Commission.)
- **Strengthen Ag Tourism**: (Again, some of the successful farm businesses are now using this technique. The annual Harvest Celebration in Pierce County continues to grow, drawing increased public participation with each passing year.)
- **Participate in the Puget Sound Fresh program**: (The Pierce County Farm Advisory Commission supports the Puget Sound Fresh Program in small ways, but still needs the funding to contribute significantly.)
- **Improve business incentives for local agriculture**: (Adoption of the Pierce Conservation District assessment program is now helping to create a very small start-up local purchase of development rights program and to provide funds for technical assistance on stewardship issues that provides new access to federal conservation cost-share programs to Pierce County farmers.)
• **Investigate the use of agricultural districts**: (If proposed amendments for the Valley Farm land designation are adopted, Pierce County will, in effect, move toward creation of these designated areas as special agricultural districts.)

In each case, Pierce County is making slow by steady progress toward a fuller integration of its agriculture industry with the needs of a growing urban population. And in each case much more help is needed.

In this connection, it is worth keeping in mind that farmers are net contributors to the public purse. There have been perhaps 100 cost of community services studies done in local communities around the country by universities, local planning offices, private consultants, non-profits, and by American Farmland Trust. These have consistently demonstrated that farmlands pay more in taxes than they receive in community services. The 1999 Skagit County example is representative. For every dollar paid in taxes by Skagit County farmlands, those lands receive back only $0.51 in community services, providing a $0.49 surplus to local government and reducing the taxes of other taxpayers. By comparison, for every dollar paid in taxes by Skagit County residential properties, those properties received back $1.25, for a $0.25 deficit hit on the public purse.

Preserving farms and farmlands is almost always a net fiscal gain for local governments. So helping farmers stay in business and keeping farmlands in agriculture and out of development is a positive investment for the public – good for every general taxpayer.

In addition to their public fiscal benefits, farms also generate important environmental and other values that are not usually reflected in the purchase price of the products farmers sell. When we lose our farms, what replaces them is almost always much more destructive of water quality, aquifer recharge, riparian and upland habitat for fish and wildlife, migration corridors, and other fundamental environmental values. When we develop our farms and lose these values, all the rest of us pay for these losses in other ways – in increased environmental regulation, higher taxes, rising costs for public infrastructure, and a poorer quality of life. Keeping our farms prevents these expensive consequences and benefits every member of our community.

Farmers do not need charity. But they do ask that the irreplaceable values they contribute to society be recognized and compensated. In each case, helping farmers with their cost of land (zoning and purchase of development rights), with their environmental compliance costs (cost share and technical assistance with conservation practices), and with economic development (strategic planning, business consulting, buy local advertising, etc.) are minimal and reasonable public investments in the future of our community.

The utility of cluster zoning:
When a jurisdiction has strong agricultural protection already in place, clustering can be a useful technique to enhance the beneficial impact of that existing protection. But the use of clustering to increase residential density in an area already intended for agriculture or the substitution of clustering in place of direct protection for larger contiguous areas in large parcels designed for agriculture may be of limited value. The land areas that are protected by this method are often relatively small. They may provide no buffer between farm and residential uses – a matter
whose importance may depend upon the likely agricultural use intended. If the regulatory structure encourages the protected land to be owned by a homeowners association for adjacent residences - those homeowners may object to the sights, smells, dust, noise, and other activities associated with farming.

If, however, one starts with relatively sound zoning with good agricultural protection at its core, and if the community involved is already heavily urbanized, clustering can be a constructive step. For clustering to be most beneficial, it helps greatly if the clustered housing can be located near major transportation in a way that prevents increased density from pouring traffic onto roadways needed for farm equipment. It helps if the clustered housing is near utilities that can be accessed easily. It helps if housing can be clustered in a way that generally minimizes the impact of the farming on residences and of the residences on farming. It helps if provision can be made for buffers between the farms and the residences. And it helps if the clustering ordinance does not add density to an area that is already intended for agricultural use.

One technique that can be used is to create planning arrangements by which the remaining open agricultural land is protected by conservation easement and then sold to a farmer rather than remaining under the potential control of a homeowners association. Short of this, one should at least create a structure that encourages agricultural use of the larger parcel and discourages private development restrictions that might prevent it. The local planning department should have sufficient authority to make judgments about issues like those above in approving applications. Keep in mind that the objective of zoning agricultural lands (like most other zoning) is to prevent inconsistent uses. Clustering may or may not serve this objective – depending on the arrangements and circumstances.

That said, clustering has received a good deal of discussion in the planning literature. There are some good examples of its use – some of which are provided in the resources listed below. It can be a useful technique for protecting agriculture in an urban-pressured setting.

**Available federal support:**
The primary sources of Federal help for agriculture are embodied in the 2002 Federal Farm Bill. Farm Bill programs do provide substantial assistance for local farmers although most Farm Bill spending goes for basic commodity programs of which Pierce County farmers are able take very little if any advantage. This is because these programs pay price supports for certain specified crops which are grown in more industrial, wholesale agricultural settings and largely not grown in Pierce County because of past land base fragmentation. This is also one of the reasons the average Pierce County farm receives less than 1/3 of the government payments received by farms on average statewide in Washington.

In addition to its commodity payments programs, however, the Federal Farm Bill provides funds for conservation programs to which Pierce County farmers have general access, more so since passage of the Pierce Conservation District assessment provided needed local technical assistance that makes this possible. Rising international trade pressure against American agricultural commodity price supports suggests that our commodity programs may be in trouble. If so, this could mean that future funding for conservation programs might rise if they come to be
seen as a substitute for disappearing commodity programs. Currently, Federal Farm Bill conservation programs include:

- **Conservation Reserve Program (CRP)** pays farmers the lease value of their land to take environmentally sensitive areas out of production and protect their environmental values. CRP is mostly an Eastern Washington program of limited use in Pierce County.

- **Conservation Reserve Enhancement Program (CREP)** makes lease payments for riparian stream buffers for salmon habitat as a sub-part of the CRP program. CREP can be of considerable value to Pierce County farmers whose lands are adjacent to salmon streams. It is likely to be a significant part of the compensation they receive for riparian salmon habitat protection on their land.

- **Conservation Security Program (CSP)** provides farmers with an ongoing payment for maintaining conservation management practices on their farms. Because of funding constraints, this program is currently limited to certain priority watersheds in Washington. The good news is that two of the watersheds presently under serious consideration are the Nisqually and the Puyallup – so there may be some Pierce County access to this funding over the next few years.

- **Environmental Quality Incentives Program (EQIP)** pays a share of the initial costs of implementing conservation management practices on farmland. This program received considerably increased funding in 2002 – but Pierce County lacked the technical assistance personnel needed to design qualifying practices for local farmers. The new PCD assessment will greatly help our farmers take better advantage of EQIP.

- **Farm and Ranchland Protection Program (FRPP)** pays 50% of the cost to purchase agricultural conservation easements from farmers to help them keep their land in agriculture and out of development. This program is definitely available to Pierce County farmers to the extent that there are local funds to provide the match. The PCD assessment helps, but only in a small way. Much stronger local funding would definitely better access these federal moneys.

- **Grasslands Reserve Program (GRP)** pays the full cost of conservation easements to protect grasslands from development. Funding for GRP is very limited. But a Thurston County rancher recently became one of only perhaps 2 acquisitions in Washington this year. So there is every reason to expect that Pierce County ranchers could qualify.

- **Wetlands Reserve Program (WRP)** pays for easements and implementation costs to protect wetlands on agricultural lands. This is a program that certainly applies and is used in Pierce County.

- **Wildlife Habitat Incentives Program (WHIP)** pays the cost of improvements and for habitat leases that protect wildlife habitat on farms. This program also, defiantly, is available to Pierce County farmers.

In addition, there are a variety of federal grants available to help with economic issues farmers face. These are sometimes available directly to farmers, or sometimes they are made to local land grant extension programs or nonprofits to provide help to farmers. In sum total, there is very little of this kind of help available. Much more help of this kind is needed both at the federal and at the state and local levels.
Resources:
- More detail about the Pierce County Farm-City Forum is available online at: http://www.farmland.org/pnw/wash_farmcityforum_new.htm
- A representative local cost of community services study report (for Skagit County) is available online at: http://www.farmland.org/pnw/skagit_cocs.htm
- A compilation of results from cost of community services studies nationwide can be found at: http://www.farmlandinfo.org/documents/27757/FS_COCS_8-04.pdf
- “Farmland Protection and the Cluster Zoning Model” (C Bowler, APA Journal, Winter, 1997), Planners Notebook, p. 127, presents two points of view, one from Tomas L. Daniels, and one from Randall Arendt. This is an excellent discussion of the issues associated with clustering in connection with farmland protection.
- In its current amended state, the cluster law in Carroll County, MD, Part II, General Legislation, Ch. 223, Articles IV and IX, Sec. 223.37 and 223.74 is a useful model. It allows density transfer between adjacent parcels and across district lines. The statute is online at: http://gcp.esub.net/cgi-bin/om_isapi.dll?clientID=89045&infobase=carroll_nfo&softpage=Browse_Frame_Pg42
- In Clark County, VA, density requirements were placed on a sliding scale. This allows smaller parcels to be developed at a higher density than larger parcels, reducing the overall density that can be built and reducing the acreage that can be removed from large, agriculturally-viable parcels while not as severely restricting development on smaller, less agriculturally important parcels. The Clarke County ordinance is available on the AFT Farmland Information Center website at: http://www.farmlandinfo.org/documents/29272/VA_ClarkerCounty_AgZoning.pdf. See also Talbot County, MD for another example. This is also available on the AFT FIC website at: http://www.farmlandinfo.org/documents/27820/MD_Talbot_APZ_CLUSTER_TDR.pdf
- Several examples of clustered subdivisions in Pennsylvania with a discussion of the advantages and disadvantages of each can be found in the Growing Greener workbook produced by the Natural Lands Trust, Hildacy Farm, 1031 Palmers Mill Road, Media, PA 19063 – “Pennsylvania Examples of Subdivisions with Substantial Conservation Areas” A summary pamphlet is online at: http://www.natlands.org/pdffiles/growinggreener.pdf
- Michigan Land Use Institute – “In Leelanau, Frustration About Agriculture Zoning” (Jess Piskor, 6/13/04) (http://www.mlui.org/growthmanagement/fullarticle.asp?fileid=16708) discusses the use and limits of cluster zoning as a technique to protect agriculture
- A summary of NRCS conservation programs is attached as Exhibit M.
- Details about NRCS conservation programs are available on the NRCS website at: http://www.nrcs.usda.gov/PROGRAMS/farmbill/2002/products.html
D. A strategic plan for economic development for Pierce County agriculture
(Data needs, time line, cost, and a proposal for answers to Phase II questions)

Pierce County Council Resolution R2004-105s raises a number of questions the answers to which require a much more complex work agenda. Some of these answers could end up calling for expensive original research, probably not intended by the Council. Most could be answered with better resources and more time but the value of the answers probably depends upon their being placed in a useful context. In what ever way the answers were provided, the essential issue raised by this Resolution is that Pierce County policy makers could greatly benefit given more information on the business viability and on the likely economic future of local agriculture.

In considering our recommendations to Pierce County for Phase II of the requested information sought by Resolution R2004-105s, AFT struggled with this issue. How can we provide as much useful information as possible in response to these questions in a way that addresses the spirit of the Resolution but does not cost so much as to be impractical? How, as we provide those answers, can we place them in a context that will be particularly useful to the Council as well as being of use to the public and to the agriculture industry itself?

The best answer we have developed is to encourage the County to support the production of a comprehensive economic development strategic plan for Pierce County agriculture. Such a plan would not be expensive - in fact the cost is comparable to our initial estimates of the cost of simply providing a best effort at direct Phase II answers. But the benefits would be substantial.

Agriculture is a strong contributor to Pierce County’s economy. It is a clean industry whose very existence generates important environmental values. It pays more in taxes than it costs in community services – saving expense for every other taxpayer. And it is composed of stable, local businesses whose owners make their homes here and who are committed to a future here.

This is also an industry that, according to all the evidence, is in transition. It is an industry that clearly needs help with finding and seizing the new directions that are emerging for its future. If ever there was a case of an industry that needed economic development strategic planning, this is it. Yet communities typically do not include agriculture in the economic development planning that they do. Pierce County is no exception. There are wonderful opportunities for economic development in the local agriculture business that would come to light, receive support, and gain credibility with the completion of a complete strategic plan for the future of local agriculture. Such a plan would empower the members of this industry to chart their future with confidence. It would provide a foundation for investment and stimulate new thinking about business models to add to the list already emerging and briefly discussed earlier in this report.

Accordingly, our recommendation to Pierce County and to the Pierce County Council is that the best, least costly, most effective, and most publicly beneficial way to gain a full understanding of the economic future of Pierce County agriculture is to complete an agriculture industry economic development strategic plan. The components of that plan would include:

- An assessment of the nature, importance, and economic impact of Pierce County agriculture
- An evaluation of the local, state, and national influences on agriculture and of the strengths, weaknesses, and trends for the future of this industry
An strategic plan to provide the foundation for solid economic development for Pierce County agriculture.

To provide further clarity on what such a plan might involve, we have attached an AFT proposal for completion of such a plan as Exhibit N to this report.

At its meeting on August 23, 2004, the Pierce County Farm Advisory Commission approved a letter endorsing and supporting the completion of an economic development strategic plan for Pierce County agriculture.

V. Conclusions:
Pierce County agriculture has a bright and sustainable future. To reach that future, it must first pass through the current period of transition away from the traditional industrial, wholesale model of agricultural business and toward a more intensive, value-added, direct market urban edge model that takes advantage of the proximity of urban markets and the increasing consumer sensitivity to food quality, freshness, safety, and environmental responsibility. Soil conditions here are excellent. But the pressures of urbanization and land fragmentation are taking their toll on the more traditional farmers in this county. This industry needs help in designing and seizing its future. This report recommends completion of an economic development strategic plan for agriculture in Pierce County as a practical, cost-efficient, and useful way to provide answers to the important questions posed by Resolution R2004-105s while offering immediate support and useful guidance to this critical local industry.

Respectfully submitted:
Don Stuart
Northwest Field Director
American Farmland Trust

Exhibits:
A. Pierce County Resolution R2004-105s
B. Outline of Phase I work
C. NRCS capability class rating system
D. Selected Economic Statistics for Pierce County
E. 2002 Census of Agriculture Washington State profile
F. 2002 Census of Agriculture Pierce County profile
G. 2002 Census of Agriculture Oregon State profile
H. 1997 Census of Agriculture Pierce County profile
I. Seattle Times Pacific Northwest Magazine article “Nurturing a Niche”, 8/19/2004
J. CSANR Research Brief on importance of direct markets for Washington Farmers
K. CSANR Research Brief on consumer direct food purchasing behavior in Washington
L. CSANR Research Brief with discussion of farmer views on land use management
M. NRCS Summary of 2002 Farm Bill conservation programs
N. AFT proposal for a Pierce County agriculture economic development strategic plan