**Appraisals with Buildings**

Appraisals with buildings generally begin with the appraiser viewing and analyzing the subject of the appraisal. After the subject and local area are analyzed, a decision is made as to the highest and best use of the subject. Comparable sales are then selected that best conform to the subject and its highest and best use. From that point, the appraisal moves on to the following:

1. **Sales Market Approach**
2. **Cost Approach**
3. **Income Approach**
4. **Reconciliation between the three approaches.**

**Sales Market Approach:**

The sales market approach involves the comparison between the subject and comparables selected from the market. The comparables selected should...

... be from the same real estate market as the subject.

... have similarities to the subject.

... reflect the same highest and best use as that of the subject.

The market area for different types of subject property will vary. The market for rural residential/farmstead subjects is often best reflected by local area sales. The market for modern hog barns is much larger and may include parts of Minnesota, Iowa, and possibly other states.

Each comparable is analyzed for the contributory value of the land and various buildings. The land value for many rural residential/farmstead appraisals can involve premiums paid for picturesque sites near places of good employment. The land value for most hog facilities is often reflected in the local farm land market.

The buildings on the subject and the comparables are analyzed for numerous factors. Included are age, size, type of construction, special amenities, maintenance, usefulness, time, and location. The appraiser then compares the features on each of the comparables to that of the subject. From this, a conclusion is reached as to the value of the subject.

**Documentation of Comparable Data:** A solid appraisal process includes viewing the comparables and analyzing the data available. The comparables’ soil data maps, publicly available acreage maps, and photographs will be included with each appraisal.

**Cost Approach:**

The cost approach is most effective when the buildings are new and of a typical modern design and construction. The RCN can then be readily estimated and the market effectively analyzed. The effectiveness of this approach diminishes when the buildings are older or people are purchasing a site for a rural residence.

In the cost approach, the land value of the subject is estimated in a process similar to that found in the bare farm-land’s sales analysis. This land value should be consistent with that of the comparables.

The value of the buildings is added to this land value. The value of the subject buildings is approached by first estimating the RCN (Replacement Cost New or Reproduction Cost New) of each building on the subject. Physical, functional, and external depreciation are then subtracted from this RCN. The physical depreciation is to be subtracted first, the functional second, and the external third.
Physical depreciation can be considered the general physical deterioration of each building. Functional depreciation is the loss due to factors in the building itself. An example of functional depreciation would be an abnormally small machine shed door that is costly to replace.

External depreciation is depreciation for other factors in the market. It is estimated from the area sales. Older farm buildings with little use for modern agriculture can have significant external depreciation. These older buildings may be structurally fine and properly maintained but the market will not pay full price for their physical and functional depreciated value. The external depreciation reflects this lessened value.

**When one analyzes the market, one may find external appreciation as well as external depreciation.** Farmsteads near larger communities can show external appreciation. It is also possible that hog finishing barns may show external appreciation. This indicates a strong demand for such buildings and should be factored into the value.

After these are subtracted, a value for each building is estimated. When these depreciated building values are added together, the result is the building contributory value for the subject’s buildings. The cost approach value comes from adding the subject’s land value estimate to that of the depreciated values of the subject’s buildings.

**Income Approach:**

The income approach describes a value based upon the subject’s ability to produce income. Depending upon the subject site, this approach can either be excluded or utilized. When the highest and best use of a site is for a rural residence/farmstead, the income approach is often excluded from the appraisal. The site is not being purchased to produce income but rather as a place to live. The returns if someone attempted to turn this into rental property would be low to often negative.

The income approach has its greatest utility when analyzing the value of large livestock units. They are being purchased or built for their ability to produce income. A net cash income for the buildings can be determined. A typical capitalization rate from the area sales can be developed. When the subject’s cash income is divided by the typical area capitalization rate, the value from the income approach can be estimated.

**Reconciliation:**

It is the responsibility of the appraiser to then compare the results from the above three approaches...sales, cost, and income. From this, a final conclusion as to the appraised value of the subject is estimated.
FARM LAND APPRAISALS

Bare farmland appraisals generally begin with the appraiser viewing and analyzing the land that is the subject of the appraisal. After the land and area are analyzed, a decision is made as to the highest and best use of the subject land. Comparable sales are then selected that best conform to the subject and its highest and best use. From that point, the appraisal moves on to the following:

1. Sales Market Approach
2. Cost Approach
3. Income Approach
4. Reconciliation between the three approaches.

A. Sales Market Approach:

This analysis estimates how the local market would value the land if the subject land was put up for sale. Valuation of farm land typically involves a comparison of the subject land to other recent area land sales. This comparison typically involves several factors:

1. Soils and their productivity
2. Drainage
3. Field shapes and sizes
4. Percentage of tillable land
5. Location
6. Time
7. Market strength

1. Soils and Their Productivity: One major factor in farm land valuation is the ability of the land to produce a crop. One can readily understand the ability of the land to produce a crop when it is described in estimated yields. In order to accomplish this, our appraisals utilize the “Productivity Index” (PI) system. This is a system developed through the cooperation of various land grant universities and the Natural Resource Conservation Service. The purpose of this system is to combine the soils with other factors such as rainfall and growing degree days to professionally estimate an index and typical expected yields for various soils in different areas.

This PI system is a widely accepted indicator of value in the private appraisal and county assessor industries. Most upper Midwest appraisers utilize the system. The NRCS also turns out other data such as agriculture land classes. The expectation is that these land classes will be utilized to describe the strength, problems and adaptability of various soil types. The intent of the NRCS and the land grant universities is for the PI system, not the land classification system, to describe the productivity.

2. Drainage: Buyers tend to pay more for land with good farm drainage. Farm drainage can sharply increase yields and reduce problems farming the land. The upper Midwest has an extensive above and below ground drainage system to move water quickly from the farm fields and into the local lakes and streams. The older style random tile system generally puts single tile lines into the lowest areas on the farm. In contrast, with system tiling, a tile line is placed an equal distance apart across a field or part of a field. In south central Minnesota, the tile lines are often placed 40’ to 80’ apart across the whole field.
Adjusting for the differences in tiling is more of a problem than adjusting for soil differences. The generally accepted method for making such adjustments is to utilize a technique called the “pairing” of sales. In this case, the pairing would attempt to isolate the price difference between two sales due to the wetness/tiling differences. With numerous factors often helping to determine a final price for a specific parcel of land, unless there are significant differences in wetness/tiling, estimating a specific dollar amount for wetness/tiling differences is difficult.

3. **Field Shapes and Sizes:** Differing sizes and shapes of fields can play a difference in value. Small irregular shaped fields, triangular shaped fields, and even just small fields take longer to farm. Due to overlap of seed, fertilizer and chemical inputs, they also may be less economical to farm. These factors would generally indicate that buyers would pay less for such land.

This may not always be the case. If just a few acres are involved on a larger field, this may not be a factor at all. If the few acres of irregular shapes lead to a better drainage outlet it even could be an advantage. Differences are to be estimated using the “pairing system” of previous sales. Like drainage, the difference in the price paid for one specific reason is difficult to estimate.

4. **Percentage of tillable land:** Typical Midwest farmland appraisals must adjust for the percentage of tillable land. The computer program used will compare the data from both the sales and the subject property in the following manner:

<table>
<thead>
<tr>
<th>Description</th>
<th>Acres</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>“A” Cropland</td>
<td>XXX</td>
<td>XXXX</td>
</tr>
<tr>
<td>“B” Cropland</td>
<td>XXX</td>
<td>XXXX</td>
</tr>
<tr>
<td>“C” Cropland</td>
<td>XXX</td>
<td>XXXX</td>
</tr>
<tr>
<td>Pasture</td>
<td>XXX</td>
<td>XXXX</td>
</tr>
<tr>
<td>Non Tillable</td>
<td>XXX</td>
<td>XXXX</td>
</tr>
<tr>
<td>Roads, etc.</td>
<td>XXX</td>
<td>XXXX</td>
</tr>
<tr>
<td>Total</td>
<td>XXX</td>
<td>XXXX</td>
</tr>
</tbody>
</table>

This technique will allow the computer program to automatically adjust both the sales and the subject for the percentage of tillable land.

5. **Location:** Location that opens the land up to alternative uses or a more vigorous market can play a role in value. In the past few months, with the aggressive market and weaker residential market, this may now be playing a lesser role. Historically, if one looks over large areas, there have been places where the same soils sell for greater or lesser amounts. Again, the pairing of sales is considered the property manner in which to adjust for location differences. With great demand for farmland, this may be less of a factor than in the past.

6. **Time:** Based upon the buyers and sellers finances and expectations, the value of land can move up and down.

Care should be used when making this adjustment. This should only be adjusted by using a “paired analysis” of sales. Older sales should be adjusted to newer sales in the same market, not a different market. Because sale prices differ in any market, more than one recent sale should be used in this type of paired analysis. Because of numerous factors, this is an adjustment that can either be very effective in describing a market or create a false impression as to value.
7. **Market Strength:** This is a factor that is often overlooked in the analysis of land. It assumes that in a strong market, the buyers will tend to overlook some problems with the land but in a soft market, they will be more selective. The computer programs can be set to describe different types of land to reflect the present market:

<table>
<thead>
<tr>
<th>Type of Cropland</th>
<th>Strong Market Value</th>
<th>Weak Market Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>“A” Cropland</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>“B” Cropland</td>
<td>97% of “A”</td>
<td>90% of “A”</td>
</tr>
<tr>
<td>“C” Cropland</td>
<td>85% of “A”</td>
<td>80% of “A”</td>
</tr>
<tr>
<td>“D” Cropland</td>
<td>70% of “A”</td>
<td>60% of “A”</td>
</tr>
</tbody>
</table>

Please note that in example “a” the buyers are assumed to not be as selective as to the land being purchased as they are in “b”. Like many other factors, this can be difficult to estimate. Indications in the market for each type of land can come from “puritan” sales (sales of basically one type of land) and pairing them with other area sales.

At the present time, the upper Midwest land market is very strong and has seen a sharp increase in value for all the types of farm land. Sales of a year ago are outdated and do not often reflect the present market.

Most of the buyers are farmers. This upward push in prices is due to good yields and high grain/livestock prices. Many farmers have a significant amount of cash for investments. The market also appears to expect that these prices and yields will continue into the future. Combining this with the historical desire of many farmers to own more farm land has resulted in record high land prices. The computer program should be adjusted to a strong market.

**Documentation of Comparable Data:** A solid appraisal process includes viewing the comparables and analyzing the data available. The comparables’ soil data maps, publicly available acreage maps, and photographs will be included with each appraisal.
B. Cost Approach

The cost approach is EXCLUDED when one completes a bare farmland appraisal. There are no buildings with which to make a cost estimate or to depreciate. The land is to be brought in at a rate equal to that of the typical land sales in the area so it should match the value of the sales market approach.

Note: With the software being utilized, a figure for the cost approach will likely appear. The approach was not utilized but this helps the reader to see the estimated value for the subject’s “A, B, C, D and other” land.

C. Income Approach

The income approach is presented in bare land appraisals. In farm appraisals, this is typically estimated by utilizing the area sales rate of return and comparing that to the subject property. Taking the gross income minus the expenses comes up with the net income for each of the area sales. Dividing this net income by the price paid for the land allows one to estimate a rate of return for each of the comparables. The appraiser then must decide which of the rates of return is for property most like that of the subject. Once this is estimated, it is divided into the net income of the subject to come up with an estimated value for the subject.

With the cash returns low in comparison to the property value, small differences in assumptions can vastly change the value of the estimate:

<table>
<thead>
<tr>
<th>Sale</th>
<th>Rate of Return</th>
<th>Subject Net Income</th>
<th>Estimated Subject Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>3.0%</td>
<td>$10000</td>
<td>$333,333</td>
</tr>
<tr>
<td>2</td>
<td>2.7%</td>
<td>$10000</td>
<td>$370,370</td>
</tr>
<tr>
<td>3</td>
<td>2.5%</td>
<td>$10000</td>
<td>$400,000</td>
</tr>
</tbody>
</table>

In the present changing market, there are many differing cash rents, input costs, etc. This further degrades the reliability of this approach. With so many variables, the appraiser must at least be consistent in assumptions between the subject and the comparables. As a result of these problems, in recent years, this has become more of a supportive approach to value than a primary approach to value.

D. Reconciliation

The final step in the appraisal is to reconcile the approaches used to estimate the value of the land. In most cases, the Sales Market Approach will be given the most emphasis with the Income Approach being analyzed as to whether it is supportive of this value. As stated earlier, as there are no buildings the Cost Approach will be excluded from the bare land appraisals.