

Planning Commission Workshop



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STAFF REPORT

RURAL HOUSING ALTERNATIVES

Date: July 13, 2023
Staff: Eric Eisenberg, Housing and Infrastructure Specialist
Mindy Brooks, Senior Long Range Planner
Re: **SECOND MEMO ON TOPIC: Housing Affordability, Size and 2.5 Acre Lots**

INTRODUCTION & SUMMARY

On April 3, 2023, staff provided the Planning Commissioners with a memo concerning whether RDD 2.5 zoning would result in housing stock that best helps with the current affordable housing crisis. The memo used tax data to assert, among other things, that the reducing RDD-5 parcels to 2.5 acres would produce only a modest savings of about \$10,000, plus any market benefit from increasing the supply of housing in the county. This compared with a much greater potential savings from smaller units, which might perhaps be \$100,000-\$200,000 less expensive than larger homes.

When the Planning Commission discussed this memo, Commissioner Spogen pointed out a flaw in the memo's analysis. Specifically, she noted that large rural parcels are more often under current use taxation than smaller parcels. Current use taxation usually results in an assessed land value of much less than regular market value. Therefore, because the memo treated assessed value as a proxy for market value, it systematically undervalued large parcels—potentially underestimating the affordability benefit of reducing the size of RDD parcels to 2.5 acres.

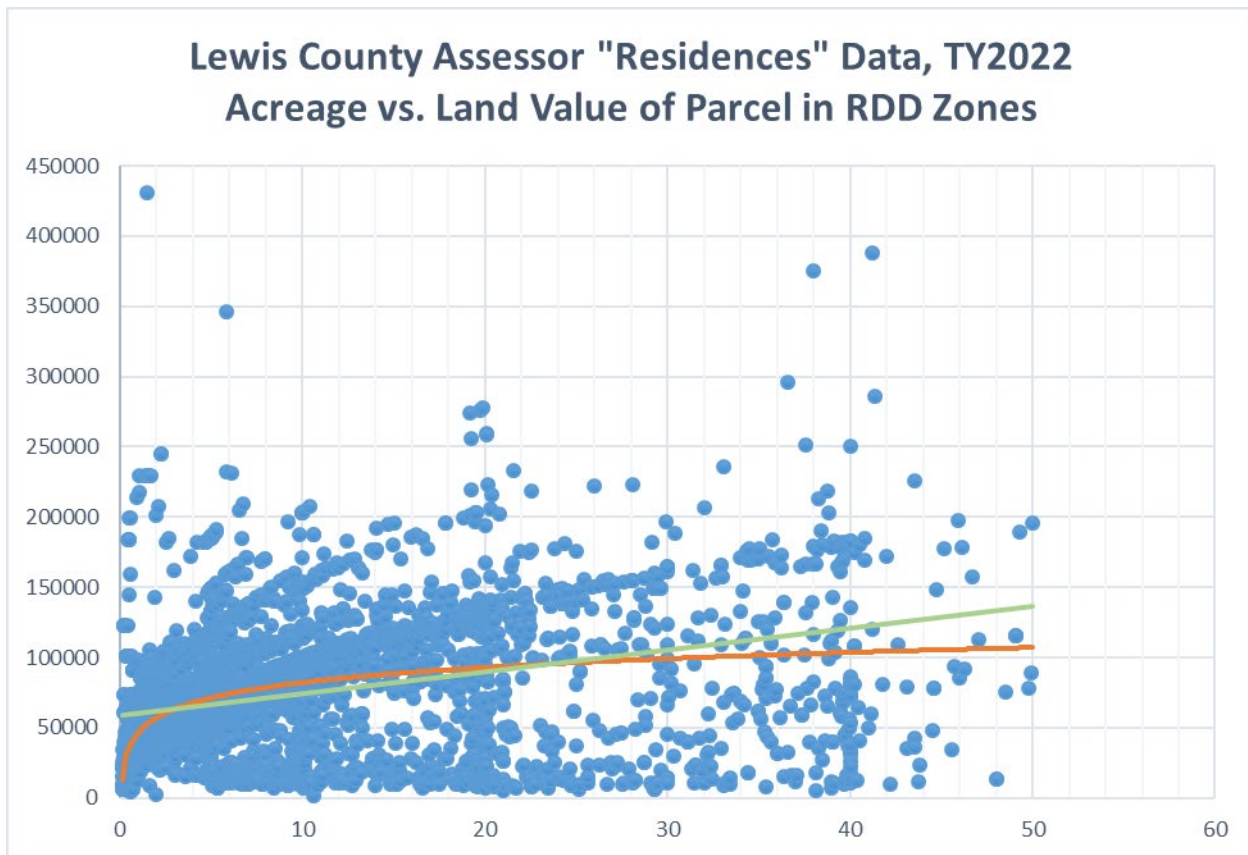
This memo describes how staff used their existing data to investigate Commissioner Spogen's objection to the methodology.

Results: Commissioner Spogen was correct: the prior memo underestimated the affordability benefit of reducing the size of RDD parcels from 5 to 2.5 acres. Modeling to exclude current use parcels, the affordability benefit was about \$20,000, twice what the prior memo suggested. But, even this doubled affordability benefit is an order of magnitude smaller than the affordability benefit of smaller units.

THE PRIOR MEMO'S ANALYSIS

The prior memo included, as Figure 1 (reprinted below), a scatterplot of acreage vs. assessed land value for all Lewis County stick-built residences on parcels of less than 50 acres in RDD zoning. The data is from tax year 2022, so it largely reflects observations or conditions from the summer of 2021. Using Excel's trendline functions, a sample linear trendline is inserted in green, and a logarithmic trendline is inserted in orange.

Figure 1.

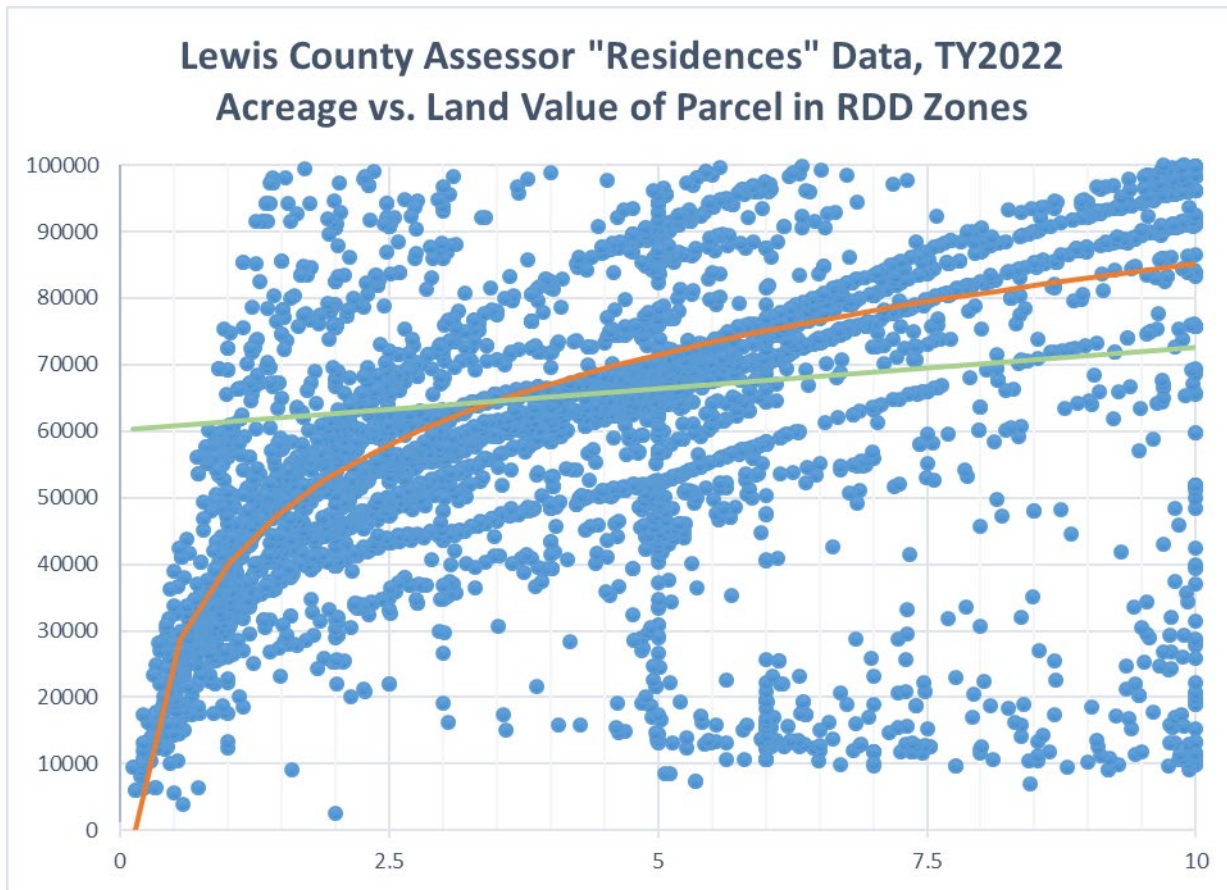


Legend: Each dot represents a stick-built residence in Lewis County on a parcel of 50 or fewer acres, zoned RDD, for the 2022 tax year. They are plotted by acreage (x-axis) vs. assessed land value (y-axis). A linear trend line appears in green; a logarithmic trend line in orange.

Because of the scale of the graph, it is not easy to see the price benefit of moving from 5 acres to 2.5 acres on either of these trendlines. Figure 2, below, is the same graph but “zoomed in” so that only the land values under \$100,000 and acreages under 10 are shown.

Figures 1 and 2 suggest that, in moving from a 5-acre lot in RDD to 2.5 acres, parcels would on average be worth \$10,000-\$15,000 less (using the orange trendline), or only \$2000-\$3000 less (using the green trendline). This was the source of the prior memo’s claim that an RDD-2.5 zone would produce only about a \$10,000 affordability benefit, plus whatever market benefit would come from there being more houses on the market if lots were allowed to be half the size as currently.

Figure 2.

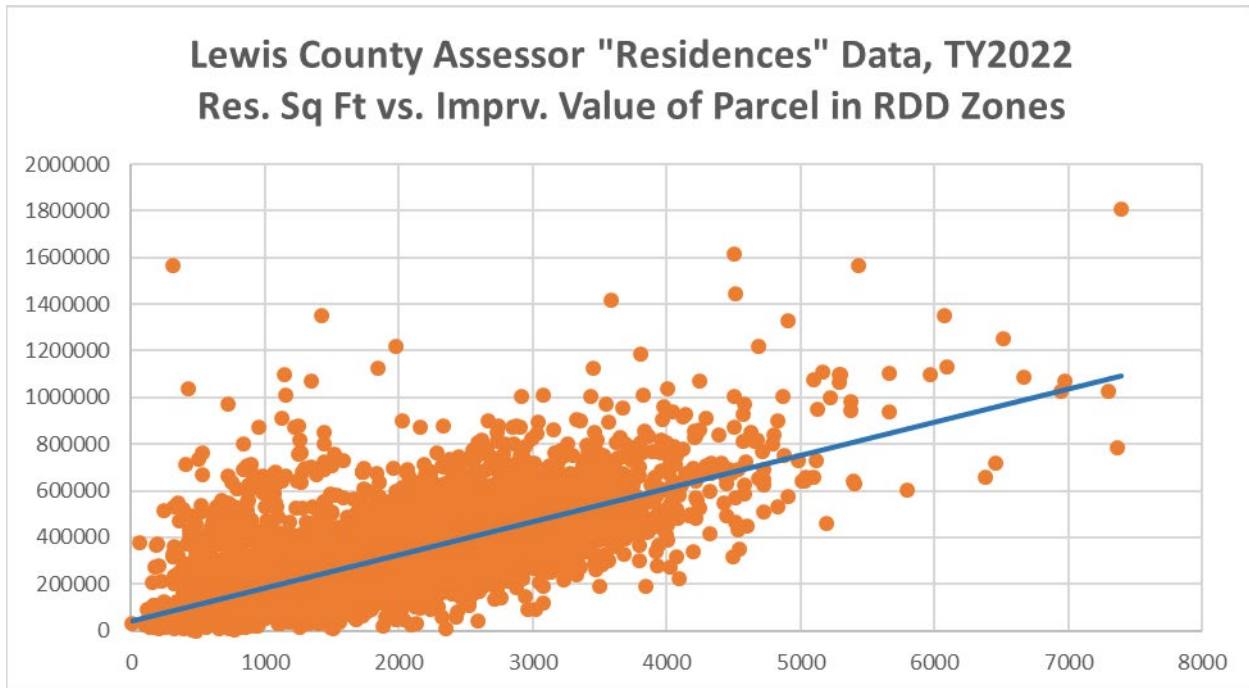


Legend: The same data as Figure 1, but showing only land values under \$100,000 and acreages under 10 acres, to make the smaller values easier to see.

The prior memo then compared this data with Figure 3, showing the assessed value of improvements versus the total finished residential square footage of those improvements. As with Figures 1 and 2, Figure 3 shows only stick-built residences on RDD parcels of 50 acres or less. It also contains a linear trendline.

Figure 3 shows a clear trend in which the value of a residence goes up as its finished residential space goes up. The value difference between a 3,000 square foot unit and a 1,000 square foot unit is, on average, about \$300,000. This was the source of the prior memo's claim that incentivizing someone to build three 1000-sq-ft housing units instead of one 3000-sq-ft housing unit would produce drastically less expensive residences, a greater benefit than reducing the land needed from 5 acres to 2.5 acres.

Figure 3.



Legend: Each dot represents a stick-built residence in Lewis County on a parcel of 50 or fewer acres, zoned RDD, for the 2022 tax year. They are plotted by total finished residential square footage (x-axis) vs improvement value (y-axis). A linear trend line appears in blue.

ACCOUNTING FOR CURRENT USE TAXATION

The Problem

The prior memo's analysis used the assessed value of land and improvements to make predictions about market value. But for certain parcels, a tax program called "current use taxation" can drastically reduce assessed land value compared to market value. In contrast, current use taxation would not normally reduce the assessed improvement value of a home. It is therefore unfair to compare assessed land and improvement values on large rural parcels that might often be in current use taxation. Parcels in current use taxation should be screened out of the analysis.

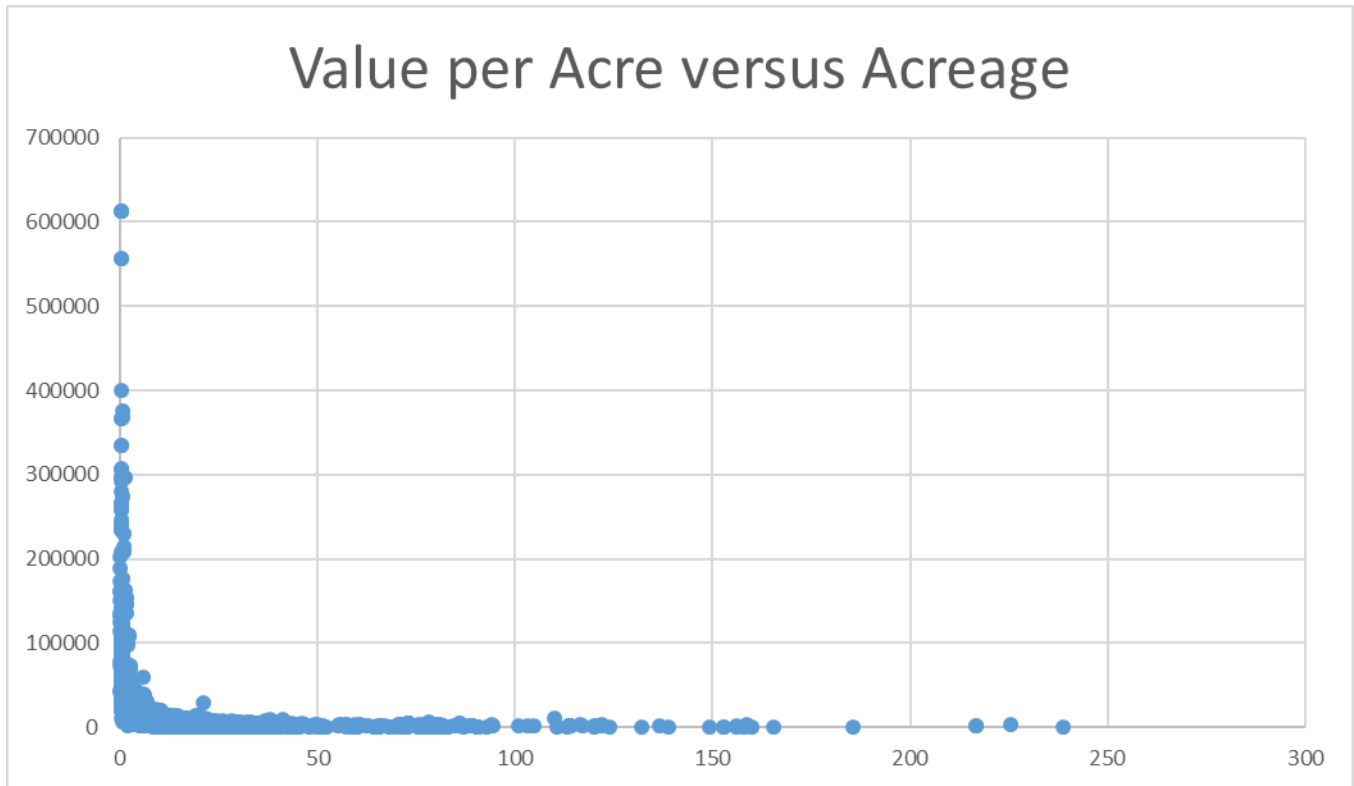
A hurdle: the table of assessor data used for the prior memo has no entry for current use taxation, to allow such parcels to be filtered out. Staff needed to develop a mechanism to screen out parcels in current use taxation despite this data gap.

The Screening Concept

Conceptually, current use parcels should be screened from the analysis because they are assessed at a lower amount per acre than market rate. Staff therefore investigated whether there was a divide in the data between parcels subject to normal taxation (assessed at a higher per-acre rate) and parcels subject to current use taxation (assessed at a lower per-acre rate). No divide was obvious from the table of data alone, which displayed an unbroken continuum of values per acre.

However, larger parcels are more likely to be in current use taxation for agriculture or forestry than smaller parcels. Staff therefore charted the assessed land value per acre versus the acreage of all parcels containing stick-built residences in lots zoned RDD. Figure 4 contains this data.

Figure 4.

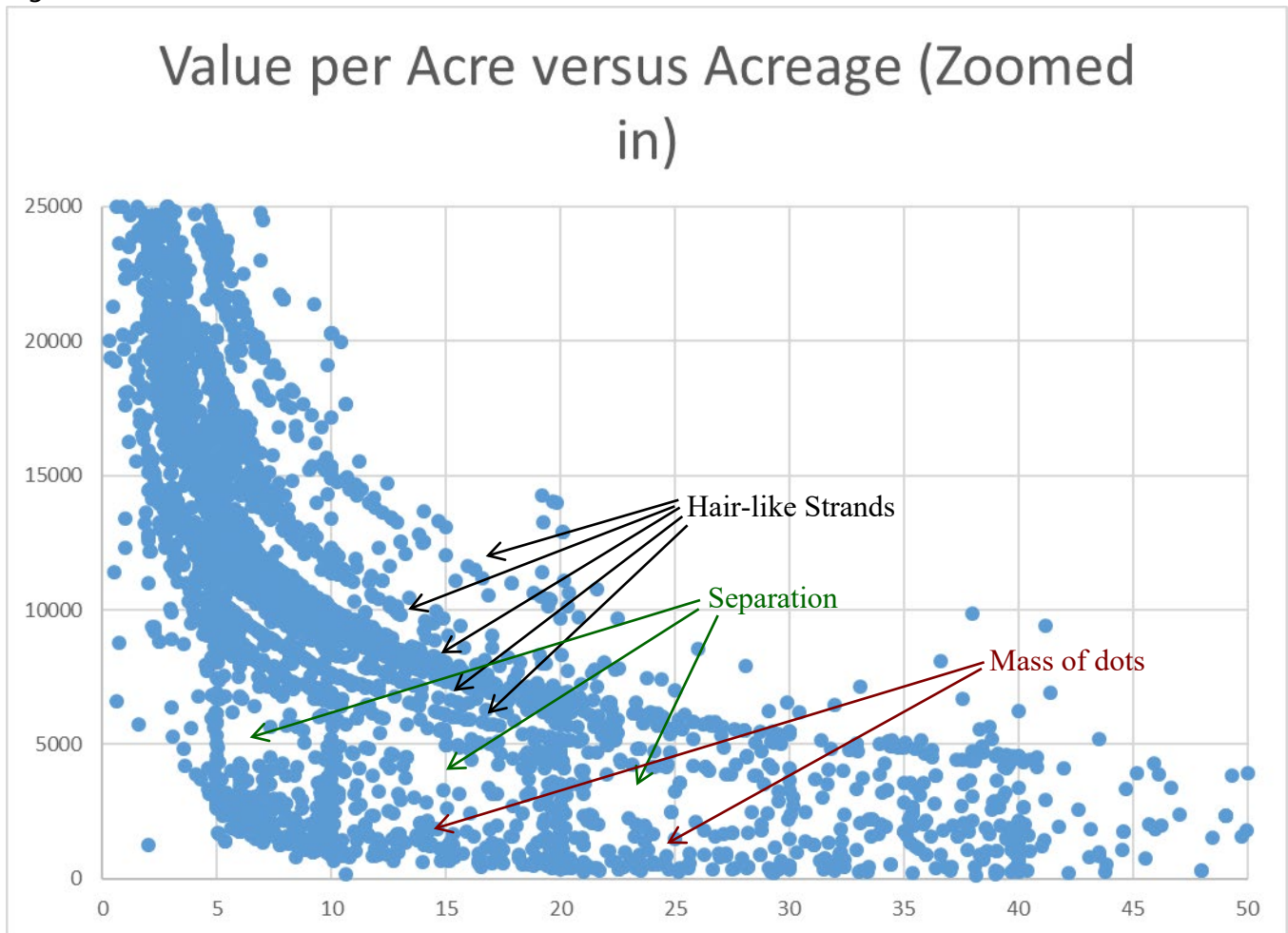


Legend: Each dot represents a stick-built residence in Lewis County, zoned RDD, for the 2022 tax year. They are plotted by assessed land value per acre versus the parcel's acreage.

Figure 4's data is so clustered near the axes that it is hard to observe. But, one can generally note that the most expensive parcels are on small lots, and value drops off steeply as the parcels get larger. From this view of the data set, no pattern emerges to help with the current-use taxation question.

A closer look at this data is helpful, however. Figure 5 shows a "zoomed in" version of this same data, depicting only parcels with a land value per acre of less than \$25,000, and 50 acres or less in area. In this view, one can see hair-like strands of dots, which form a series of similar-shaped curves in the upper portion of the data. Below these strands is a slight separation, under which is a mass of dots that do not form the same hair-like strands. These features are labelled in Figure 5.

Figure 5.

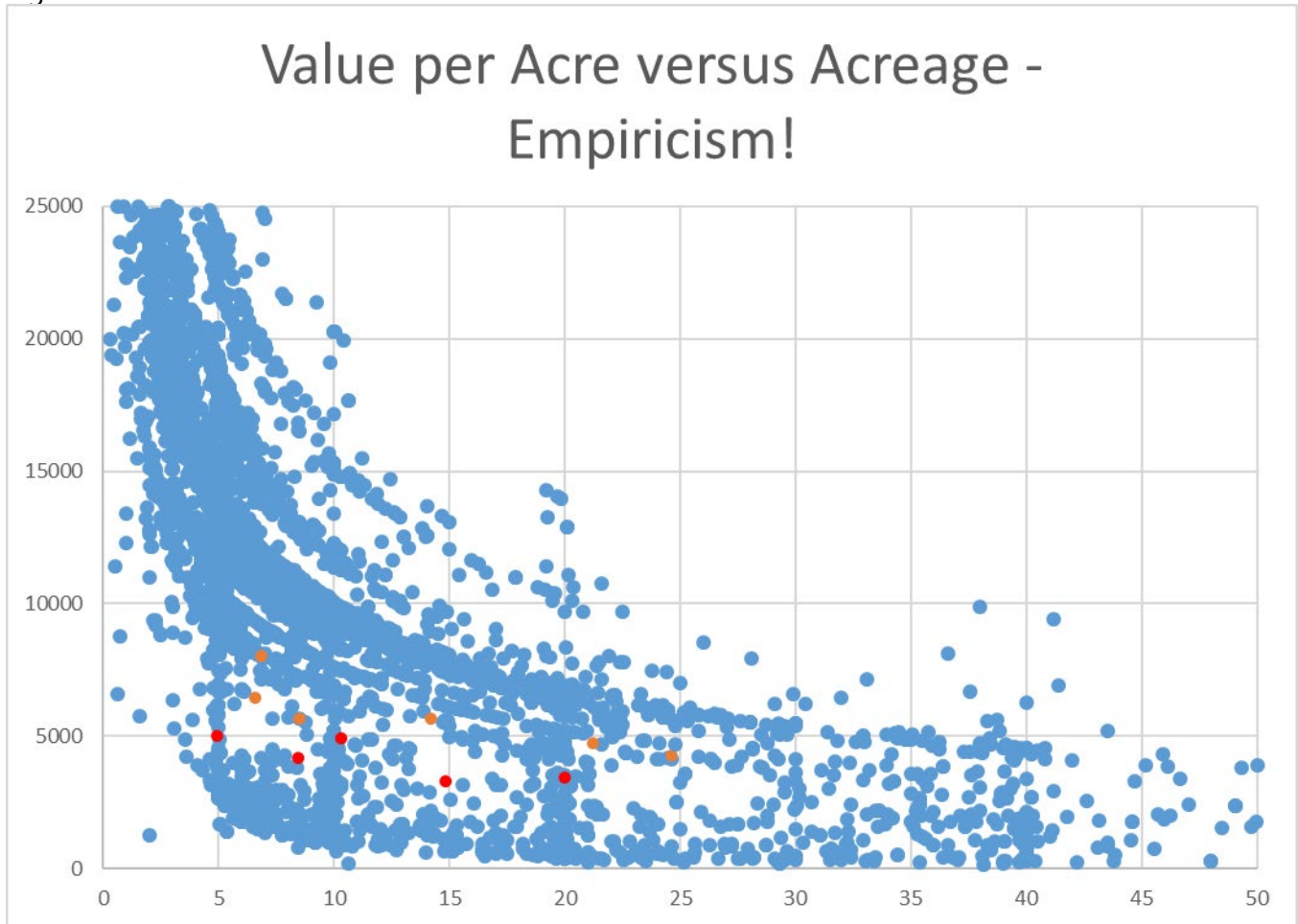


Legend: The same data as Figure 4, but showing only assessed land values per acre under \$25,000 and acreages under 50 acres, to make the smaller values easier to see. The hair-like strands, separation, and mass of lower dots are labelled.

Staff hypothesized that the hair-like strands in the upper portion of the data were parcels in normal taxation, while the less-organized mass of dots below the separation were those in current use taxation. To test this, staff investigated dots on each side of the separation, finding the tax parcel number of the dot in question and using Lewis County Parcels to verify tax status.

The result was Figure 6, which shows the tested parcels as orange if they were in normal taxation, and as red if they were in current use taxation. Sure enough, the bottommost hair-like strand had parcels in normal taxation, and parcels below the separation were in current use taxation. Parcels in the separation itself were a mix of both.

Figure 6.

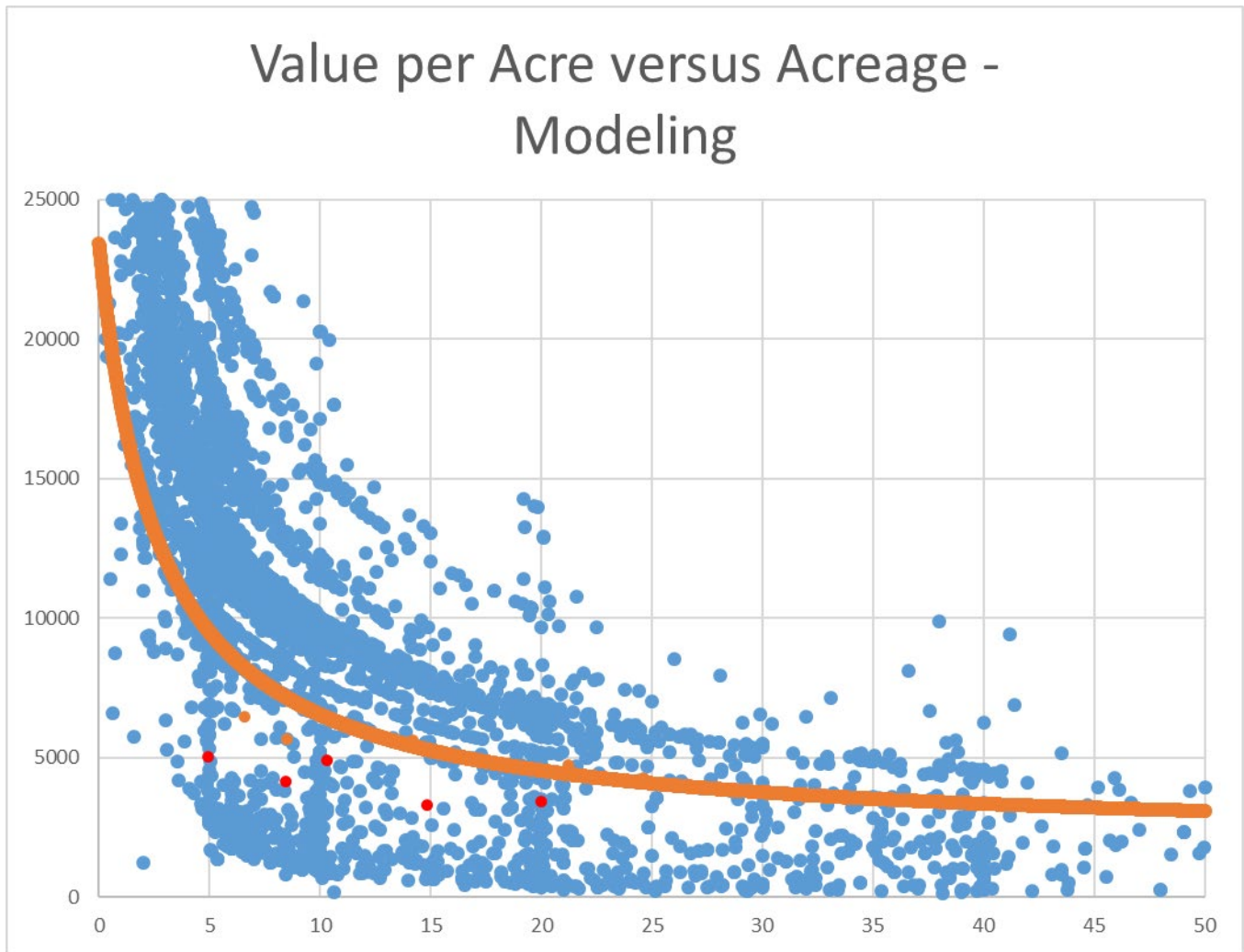


Legend: The same data and scale as Figure 5, but showing some test dots as orange if they were in normal taxation and as red if they were in current use taxation.

To screen out the parcels in current use taxation, staff then plotted a line that corresponded to the bottommost hair-like strand. This line cut off the normal taxation parcels from the current-use taxation parcels. A few normal taxation parcels would get eliminated below this line as well, but this was only a minor imprecision. Figure 7 depicts the line corresponding to the lowest hair-like strand. The equation for the line was:

$$y = \frac{150000}{2x + 7} + 2000$$

Figure 7.



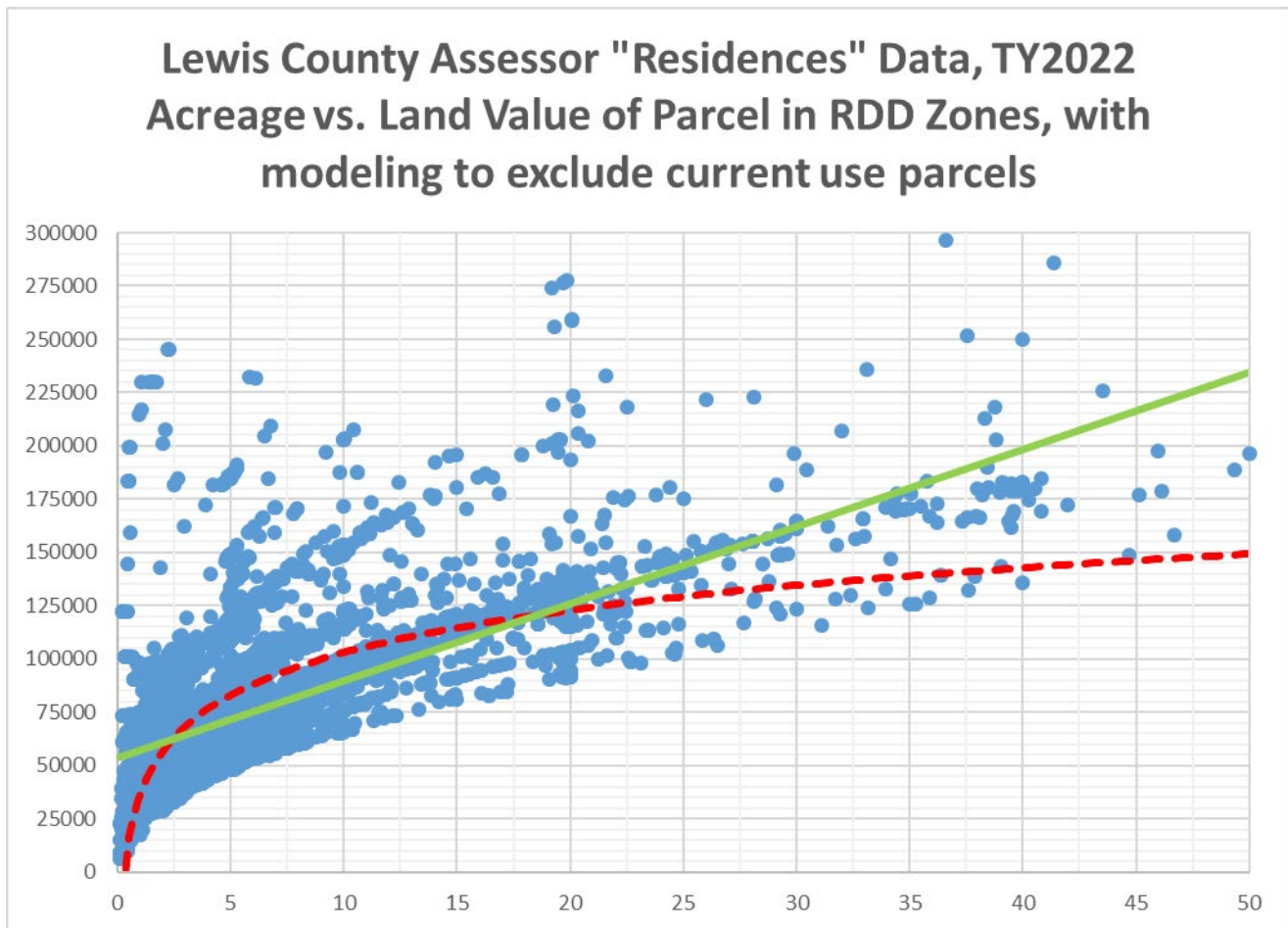
Legend: The same data and scale as Figure 6, with a line plotted that corresponded to the lowest hair-like strand, which contained parcels in normal taxation. The equation of the line is $y = [150000 / (2.6x+7)] + 2000$.

With that line in place, staff now had a mechanism to screen out the parcels in current use taxation. Any parcel above the line—i.e., where the land value per acre (y) was more than the function of acreage (x) shown in the equation—should be included as a normal taxation parcel, and any parcel below the line should be excluded as potentially in current use taxation. Staff used Excel to perform the calculation necessary and screened out the current use taxation parcels.

RE-RUNNING THE ANALYSIS WITHOUT PARCELS IN CURRENT USE TAXATION

Staff then re-ran the analysis from the previous memo using this new data set, which excluded parcels in current use taxation through the modeling above. Figure 8 once again plots the assessed land value of each parcel versus its acreage, for stick-built residences on land zoned RDD in parcels of 50 acres or less, but this time screening out the current use taxation parcels. Trend lines are again provided.

Figure 8.

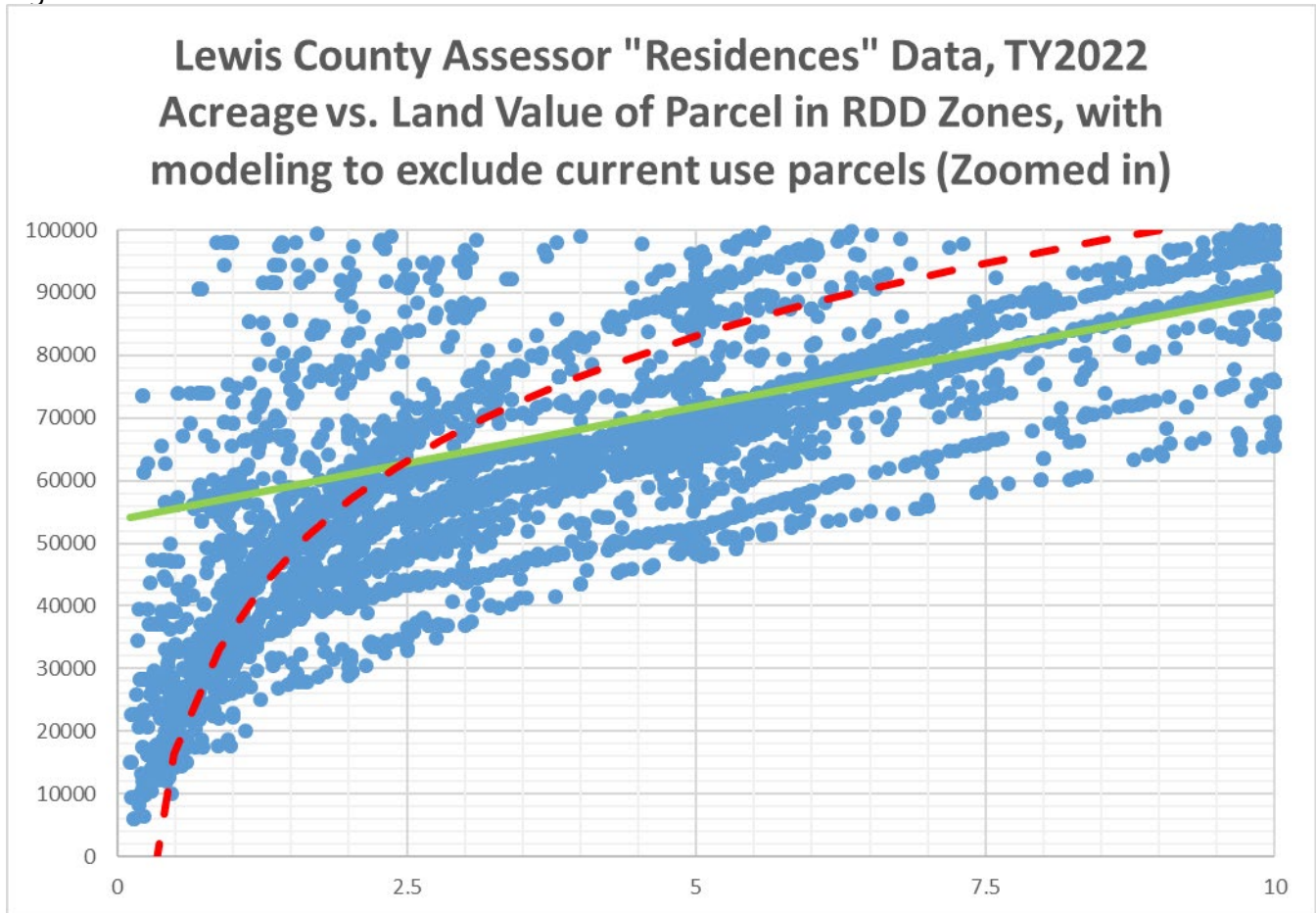


Legend: Each dot represents a stick-built residence in Lewis County on a parcel of 50 or fewer acres, zoned RDD, for the 2022 tax year. They are plotted by acreage (x-axis) vs. assessed land value (y-axis). Through modeling, parcels in current use taxation have been removed. A linear trend line appears in green; a logarithmic trend line in red.

Figure 8 is very similar to Figure 1, except that a large mass of low-value parcels no longer appears along the bottom of the graph. These were the current use parcels, the value of which was low despite their large size. These parcels' presence is precisely what Commissioner Spogen identified as a problem in the prior analysis; the modeling successfully screened them out to fix the problem.

For the best view of the value difference between parcels of 5 and 2.5 acres with this new data set, Figure 9 depicts the same data but is "zoomed in" to show only parcels of under 10 acres, with a value of less than \$100,000. The same trend lines appear.

Figure 9.



Legend: The same data as Figure 8, but showing only land values under \$100,000 and acreages under 10 acres, to make the smaller values easier to see.

In Figure 9, the average assessed land value for 5-acre parcels is around \$82,000 via the red logarithmic trend line, and around \$72,000 via the green linear trend line. In both trend lines, the value of a 2.5-acre parcel averages around \$62,000. Therefore, when screening out the parcels in current use taxation, the affordability benefit of moving from 5- to 2.5-acre parcels could be as much as \$20,000, which is double the amount proposed in the previous memo. As discussed in the previous memo, this benefit would be in addition to the price reduction from increasing the supply of houses on the market.

CONCLUSION

Commissioner Spogen was right: the prior memo's analysis was flawed. It failed to note that current use taxation depresses the assessed land value of large parcels, and therefore mismeasured the affordability benefit of reducing 5-acre RDD parcels to 2.5 acres. When current use taxation parcels are screened, the affordability benefit is \$20,000 per parcel in addition to any price reduction from increasing the supply of houses on the market. This is double what the previous memo posited. However, even this \$20,000 is an order of magnitude smaller than the benefit of promoting smaller-sized residential units, which could be in the hundreds of thousands of dollars. Therefore, the prior memo's conclusion stands: smaller units are a more effective strategy to promote affordable housing.