

According to Property Assessment Valuation, the first step in developing a cost approach is to estimate the land value at its highest and best use. KPB does this by reviewing, analyzing, and statistically testing reported land sales in a given market area. That updated land value is then combined with the value of all improvements; the sum of the two is the assessed value. This application is in accordance with State of Alaska AS 29.45.110.

## Land Comments:

Subject property is a 0.87 acre parcel located in South Soldotna. Property has paved access, electric utility, natural gas utility, and no view.

The current land model was reviewed by Land Appraiser, Matt Bruns. This property is being valued fairly and equitably with surrounding like-kind properties. Per the attached letter it has been confirmed by Scott Huff (Platting Manager) that the 40,000 square foot setback requirement for well and septic is for new subdivisions only, and thus does not apply to this parcel.

For the South Soldotna/ Kasilof market area (\#150), 55 sales from the last three years were analyzed. The median ratio for all of the sales is $91.50 \%$ and Coefficient of Dispersion (COD) is $19.65 \%$. All ratios are within acceptable ranges as set by International Association of Assessing Officers IAAO).

| Ratio Sum | 50.47 |  | 2.73 | Excluded | 0 |
| ---: | ---: | :---: | ---: | ---: | ---: |
| Mean | $91.77 \%$ | Earliest Sale | $11 / 14 / 2017$ |  | \# of Sales |
| Median | $91.50 \%$ | Latest Sale $8 / 5 / 2020$ | Total AV | $\$$ | $1,870,100$ |
| Wtd Mean | $87.65 \%$ | Outlier Information | Total SP | $\$$ | $2,133,510$ |
| PRD: | 1.05 | Range | 1.5 | Minimum | $46.43 \%$ |
| COD: | $19.65 \%$ | Lower Boundary | $24.95 \%$ | Maximum | $150.00 \%$ |
| St. Dev | 0.2350 | Upper Boundary | $162.40 \%$ | Min Sale Amt | $\$$ |

For 2021, the market area boundary for this area was adjusted to more accurately reflect market conditions. Previously these properties were being valued with properties located within the City of Kenai. These properties are now located in the South Soldotna/Kasilof market area (\#150). The last time land values in this area were updated was 2010.

## References

International Association of Assessing Officers. (1996). Property Assessment Valuation Second edition. Chicago: International Association of Assessing Officers.

## RECONCILIATION AND FINAL VALUE CONCLUSION

The Assessing Department requests the Board of Equalization uphold their value recommended below based on the following findings:

1. Subject property is currently valued uniformly and equitably with the surrounding parcels.
2. Influences are applied correctly and uniformly to the subject property.
3. The Assessing Department uses standardized mass appraisal procedures and techniques to specify and calibrate market models which are applied uniformly to value property within the borough. The modeled values are statistically tested to ensure a level of accuracy and equity of assessment that meets the guidelines established by the Alaska Association of Assessing Officers and the International Association of Assessing Officers, and in compliance with State Statutes.
4. The Assessing Department reviewed all physical characteristics of the subject property to ensure all data was accurately captured.

## ASSESSOR'S RECOMMENDATION:

## APPELLANT: Andrews, James

PARCEL NUMBER: 131-091-50

## LEGAL DESCRIPTION: T 4N R11W SEC 14 Seward Meridian KN THAT PORTION OF THE NW1/4 LYING SOUTHWEST OF ECHO LAKE ROAD

TOTAL: \$18,100
BOARD ACTION:

LAND: $\qquad$ IMPROVEMENTS: $\qquad$ TOTAL: $\qquad$
SUBJECT MAP


SUBJECT MAP



| Ratio Sum | 50.47 |  | Excluded | 0 |  |
| ---: | ---: | ---: | ---: | ---: | ---: |
| Mean | $91.77 \%$ | Earliest Sale 11/14/2017 | \# of Sales | 55 |  |
| Median | $91.50 \%$ | Latest Sale 8/5/2020 | $\mathbf{1 . 0 0} \$$ | $1,870,100$ |  |
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| PRD: | 1.05 | Range | 1.5 | Minimum | $46.43 \%$ |
| COD: | $19.65 \%$ | Lower Boundary | $24.95 \%$ | Maximum | $150.00 \%$ |
| St. Dev | 0.2350 | Upper Boundary | $162.40 \%$ | Min Sale Amt $\$$ | 2,000 |
| COV: | $25.61 \%$ |  | Max Sale Amt | $\$$ | 120,000 |



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| ---: | ---: | ---: | ---: | ---: | ---: |
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| neighborhooc | pxfer date | Irsn | PIN | Total Acres | Current Land Val |  | Sale Price |  | LandType | SaleCd | 20 Cert Lanc | Ratio |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 150 | 9/4/18 | 36130 | 13104116 | 10.00 | \$ | 36,600 | \$ | 40,000 | 20 | C | \$47,400 | 91.50\% |
| 150 | 6/29/18 | 36140 | 13104151 | 1.24 | \$ | 51,100 | \$ | 50,000 | 20 | C | \$50,100 | 102.20\% |
| 150 | 2/8/19 | 36145 | 13104156 | 3.89 | \$ | 112,200 | \$ | 120,000 | 20 | C | \$52,800 | 93.50\% |
| 150 | 12/23/19 | 98014 | 13104164 | 7.71 | \$ | 77,800 | \$ | 70,000 | 20 | C | \$41,700 | 111.14\% |
| 150 | 6/29/20 | 104913 | 13104436 | 7.37 | \$ | 68,300 | \$ | 100,000 | 20 | C | \$42,700 | 68.30\% |
| 150 | 12/17/18 | 105603 | 13104604 | 13.02 | \$ | 59,100 | \$ | 62,000 | 20 | V | \$48,700 | 95.32\% |
| 150 | 11/15/18 | 105604 | 13104605 | 13.02 | \$ | 60,900 | \$ | 52,000 | 20 | Z | \$45,700 | 117.12\% |
| 150 | 11/19/19 | 105605 | 13104606 | 12.20 | \$ | 64,300 | \$ | 75,000 | 20 | V | \$47,100 | 85.73\% |
| 150 | 4/26/19 | 36355 | 13107050 | 18.53 | \$ | 61,000 | \$ | 72,500 | 20 | C | \$53,400 | 84.14\% |
| 150 | 11/6/18 | 82090 | 13107062 | 1.50 | \$ | 20,400 | \$ | 24,500 | 20 | V | \$19,100 | 83.27\% |
| 150 | 6/21/18 | 82090 | 13107062 | 1.50 | \$ | 20,400 | \$ | 15,000 | 20 | C | \$19,100 | 136.00\% |
| 150 | 7/3/19 | 91947 | 13107075 | 2.01 | \$ | 24,200 | \$ | 32,000 | 20 | V | \$22,500 | 75.63\% |
| 150 | 5/21/19 | 36399 | 13109156 | 9.48 | \$ | 94,100 | \$ | 93,500 | 20 | Z | \$46,200 | 100.64\% |
| 150 | 11/15/17 | 36417 | 13109301 | 1.03 | \$ | 13,000 | \$ | 28,000 | 20 | C | \$13,700 | 46.43\% |
| 150 | 9/6/19 | 36436 | 13109320 | 1.20 | \$ | 14,200 | \$ | 26,400 | 20 | Z | \$14,800 | 53.79\% |
| 150 | 8/17/18 | 36604 | 13112047 | 7.14 | \$ | 39,900 | \$ | 50,000 | 20 | C | \$36,100 | 79.80\% |
| 150 | 5/30/18 | 36705 | 13117105 | 1.85 | \$ | 9,700 | \$ | 8,750 | 20 | C | \$9,000 | 110.86\% |
| 150 | 2/11/19 | 105646 | 13117208 | 3.23 | \$ | 40,300 | \$ | 64,000 | 20 | Z | \$37,100 | 62.97\% |
| 150 | 3/14/18 | 36909 | 13124001 | 0.66 | \$ | 40,700 | \$ | 85,900 | 20 | Z | \$39,300 | 47.38\% |
| 150 | 3/16/18 | 37009 | 13127010 | 3.35 | \$ | 34,300 | \$ | 37,100 | 20 | Z | \$27,500 | 92.45\% |
| 150 | 11/14/17 | 81920 | 13128032 | 1.51 | \$ | 16,200 | \$ | 17,500 | 20 | C | \$18,400 | 92.57\% |
| 150 | 1/31/20 | 37071 | 13130018 | 5.58 | \$ | 23,100 | \$ | 20,000 | 20 | C | \$21,800 | 115.50\% |
| 150 | 7/31/18 | 37242 | 13133019 | 1.78 | \$ | 45,200 | \$ | 55,000 | 20 | Z | \$22,200 | 82.18\% |
| 150 | 8/3/18 | 37480 | 13138022 | 1.11 | \$ | 4,700 | \$ | 7,500 | 20 | C | \$7,400 | 62.67\% |
| 150 | 10/10/19 | 37518 | 13138060 | 0.95 | \$ | 16,500 | \$ | 12,000 | 20 | C | \$14,600 | 137.50\% |
| 150 | 6/28/19 | 37610 | 13140074 | 1.19 | \$ | 16,900 | \$ | 22,500 | 20 | V | \$15,800 | 75.11\% |
| 150 | 10/1/19 | 37697 | 13142020 | 1.18 | \$ | 14,000 | \$ | 12,000 | 20 | C | \$14,100 | 116.67\% |
| 150 | 4/4/18 | 37978 | 13146034 | 2.26 | \$ | 24,600 | \$ | 28,000 | 20 | C | \$22,800 | 87.86\% |
| 150 | 9/17/18 | 38157 | 13152011 | 0.81 | \$ | 15,000 | \$ | 10,000 | 20 | C | \$13,500 | 150.00\% |
| 150 | 8/31/18 | 38176 | 13152030 | 0.99 | \$ | 16,900 | \$ | 11,460 | 20 | C | \$14,900 | 147.47\% |
| 150 | 9/9/19 | 38583 | 13167049 | 3.74 | \$ | 36,500 | \$ | 32,000 | 20 | C | \$29,000 | 114.06\% |
| 150 | 6/7/19 | 91867 | 13167057 | 1.05 | \$ | 17,500 | \$ | 30,000 | 20 | V | \$15,400 | 58.33\% |
| 150 | 2/28/18 | 38590 | 13167105 | 6.11 | \$ | 43,700 | \$ | 60,000 | 20 | C | \$49,400 | 72.83\% |
| 150 | 6/19/19 | 38696 | 13169039 | 1.13 | \$ | 36,400 | \$ | 32,500 | 20 | Z | \$31,800 | 112.00\% |
| 150 | 9/27/19 | 39054 | 13303345 | 5.00 | \$ | 28,100 | \$ | 30,000 | 20 | C | \$25,600 | 93.67\% |
| 150 | 8/22/19 | 39064 | 13303409 | 4.54 | \$ | 26,600 | \$ | 30,900 | 20 | Z | \$24,200 | 86.08\% |
| 150 | 7/24/18 | 39165 | 13307123 | 4.16 | \$ | 45,700 | \$ | 67,500 | 20 | C | \$42,800 | 67.70\% |
| 150 | 2/14/18 | 91142 | 13308424 | 7.66 | \$ | 92,300 | \$ | 85,500 | 20 | Z | \$84,300 | 107.95\% |
| 150 | 4/8/19 | 39816 | 13314041 | 0.26 | \$ | 2,000 | \$ | 2,000 | 20 | C | \$2,000 | 100.00\% |
| 150 | 9/5/18 | 39944 | 13320014 | 4.91 | \$ | 31,100 | \$ | 31,000 | 20 | C | \$28,700 | 100.32\% |
| 150 | 7/3/19 | 39994 | 13321037 | 1.38 | \$ | 20,500 | \$ | 26,800 | 20 | C | \$19,200 | 76.49\% |
| 150 | 5/15/19 | 40151 | 13329006 | 2.78 | \$ | 29,300 | \$ | 30,000 | 20 | C | \$27,000 | 97.67\% |
| 150 | 3/26/20 | 40332 | 13335001 | 5.16 | \$ | 10,700 | \$ | 19,500 | 20 | V | \$6,000 | 54.87\% |
| 150 | 8/6/19 | 40373 | 13335045 | 2.44 | \$ | 21,700 | \$ | 19,200 | 20 | C | \$20,100 | 113.02\% |
| 150 | 7/15/19 | 40383 | 13336007 | 1.42 | \$ | 34,300 | \$ | 57,000 | 20 | V | \$32,200 | 60.18\% |
| 150 | 10/22/19 | 40442 | 13338011 | 2.09 | \$ | 26,100 | \$ | 28,500 | 20 | C | \$24,200 | 91.58\% |
| 150 | 8/5/20 | 40475 | 13338126 | 2.09 | \$ | 22,200 | \$ | 25,000 | 20 | C | \$20,600 | 88.80\% |
| 150 | 7/14/20 | 40501 | 13338152 | 2.00 | \$ | 21,600 | \$ | 25,500 | 20 | V | \$20,100 | 84.71\% |
| 150 | 5/1/18 | 40550 | 13340014 | 2.18 | \$ | 20,000 | \$ | 22,500 | 20 | V | \$18,600 | 88.89\% |
| 150 | 12/22/17 | 40553 | 13340017 | 2.18 | \$ | 20,000 | \$ | 22,500 | 20 | V | \$18,600 | 88.89\% |
| 150 | 2/20/20 | 40558 | 13340022 | 1.09 | \$ | 13,400 | \$ | 16,000 | 20 | V | \$12,600 | 83.75\% |
| 150 | 7/29/19 | 40613 | 13342019 | 1.66 | \$ | 27,700 | \$ | 24,000 | 20 | C | \$26,100 | 115.42\% |
| 150 | 8/19/19 | 40865 | 13350001 | 13.00 | \$ | 56,500 | \$ | 50,000 | 20 | C | \$50,500 | 113.00\% |
| 150 | 3/6/19 | 41219 | 13358006 | 3.52 | \$ | 38,300 | \$ | 50,000 | 20 | V | \$35,400 | 76.60\% |
| 150 | 8/31/18 | 41234 | 13359008 | 2.53 | \$ | 12,300 | \$ | 13,000 | 20 | C | \$14,100 | 94.62\% |



## Kenai Peninsula Borough <br> Planning Department

## MEMORANDUM

TO: Les Crane - Appraisal System Analyst<br>THRU: Melanie Aeschliman - Planning Director<br>FROM: Scott Huff - Platting Manager $S \notin$<br>DATE: May 6, 2021

RE: $\quad$ minimum lot size requirements

The following section of KPB code specifies the minimum lot size allowable for subdivisions being approved by the Kenai Peninsula Borough acting as the platting authority.

### 20.30.200. Lots-Minimum size.

Except in cities where zoning and subdivision regulations establish different minimums, lots must be designed to meet the following area requirements:
A. Lots shall contain at least 6,000 square feet if served by public wastewater disposal and water systems.
B. Lots shall contain at least 40,000 square feet if both the well and wastewater disposal are to be located on the lot unless it can be demonstrated to the satisfaction of the commission that a smaller lot size is adequate for the safe location and operation of an on-site well and wastewater disposal system.
C. Subdivisions designed to be served by public wastewater disposal and water systems but not yet served by such systems may be permitted to contain lots of less than 40,000 square feet if the following conditions are met:

1. The available area may be reduced to 20,000 square feet when public water or wastewater disposal system is available, complying with KPB 20.40;
2. A statement from an engineer affixed with his seal and signature attesting that the proposed lot design and associated building restrictions will assure adequate area is available to each building site for safe on-site well and wastewater disposal, including area for a replacement wastewater disposal system.
(Ord. No. 2014-02, § 1, 2-11-14)
Section $20.30 .200(B)$ requires that lots that will be using on site well and wastewater disposal be at least 40,000 sq. ft. in size. Parcels less than 40,000 sq. ft. may be approved if it is demonstrated to the satisfaction of the commission that there is adequate area available. To obtain approval for lots less than $40,000 \mathrm{sq}$. ft. a developer will provide a soils analysis report to the commission that will show the existing soils, location of existing wells and septic systems, proposed location for new well and septic system placement, and the type of wastewater system
that will be required. The commission then will decide to approve the lots that are less than 40,000 sq. ft.

For lots being served by onsite water and wastewater, section KPB 20.40.040 - Conventional onsite soils absorption systems, requires that the engineer show that there is on each lot at least $20,000 \mathrm{sq}$. ft. of contiguous area suitable for an initial and replacement wastewater disposal system. If the lot does not contain $20,000 \mathrm{sq}$. ft . of contiguous area for suitable for a wastewater system, then the engineer must specifically show the location where a wastewater system(s) will be placed.

The State of Alaska Department of Environmental Conservation reviews, and approves, the installation of all wastewater systems. KPB does not review, approve, or regulate the installation of wastewater systems.

Before subdivision standards were in place, subdivision plats and deed splits were completed that may have created lots smaller than the current minimum size standard. The existing lots are allowed to remain 'as is', and are not required to comply with the KPB minimum lot size standard. Substandard sized lots are still required to meet the State of Alaska DEC requirements for wastewater systems installation.

## Price per Acre Comparison

A very popular way to compare land values is to do a simple Price per Acre calculation. Simply stated this is the assessed value divided by the acreage. This will work just fine if the properties you are comparing are exactly the same size and have the exact same influences, otherwise you are just comparing apples to oranges.


Below is a sample comparison of 2 parcels that have the same acreage, with different influences.

| 5.0 AC Base | \$ 50,000 | 5.0 AC Base | \$ 50,000 |
| :---: | :---: | :---: | :---: |
| Gravel Maint | \$ | Paved | \$ 5,000 |
| Elec Yes | \$ | Elec Yes | \$ |
| Gas No | \$ $(10,000)$ | Gas Yes | \$ |
| View Limited | \$ 12,000 | View Good | \$ 25,000 |
|  |  | Waterfront Pond | \$ 25,000 |
|  |  |  |  |
| Land Value | \$ 52,000 | Land Value | \$105,000 |
| Price/AC | \$ 10,400 | Price/AC | \$ 21,000 |

Below is a sample comparison of 2 parcels that have the same influences, with different acreages.

| 5.0 AC Base | \$ 50,000 | 10.0 AC Base | \$ 70,000 |
| :---: | :---: | :---: | :---: |
| Paved | \$ 5,000 | Paved | \$ 7,000 |
| Elec Yes | \$ | Elec Yes | \$ |
| Gas Yes | \$ | Gas Yes | \$ |
| View Good | \$ 25,000 | View Good | \$ 35,000 |
| Waterfront Ponc | \$ 25,000 | Waterfront Pond | \$ 35,000 |
|  |  |  |  |
| Land Value | \$105,000 | Land Value | \$147,000 |
| Price/AC | \$ 21,000 | Price/AC | \$ 14,700 |

## AS 29.45.110. FULL AND TRUE VALUE

(a) The assessor shall assess property at its full and true value as of January 1 of the assessment year, except as provided in this section, AS 29.45.060, and 29.45.230. The full and true value is the estimated price that the property would bring in an open market and under the then prevailing market conditions in a sale between a willing seller and a willing buyer, both conversant with the property and with prevailing general price levels.

## BURDEN OF PROOF

The appellant has the burden of proving or providing any information to show that the assessed values are excessive, improper or unequal. The assessor is accorded broad discretion in deciding among the recognized valuation methods. The assessor's choice of one recognized method of valuation over another is simply the exercise of a discretion committed to the assessor by law.
*A borough has discretion to appraise, by whatever recognized method of valuation it chooses, so long as there is no fraud or clear adoption of a fundamentally wrong principle of valuation. Hoblit vs. Greater Anchorage Area Borough, Sup. Ct. Op. No. 636 (File No. 1214), 473 P.2d 630 (Alaska 1970).

## Definitions

Assessment progressivity (regressivity). An appraisal bias such that higher value properties are appraised higher (lower) than low-value properties. See also price-related differential.

Coefficient of dispersion (COD). The average deviation of a group of numbers from the median expressed as a percentage of the median. In ratio studies, the average percentage deviation from the median ratio. Acceptable range: Land under 30\%, residential under 20\%.

Coefficient of variation (COV). The standard deviation expressed as a percentage of the mean. Acceptable range: 1.25 of the COD.

Mean: The result of adding all the values of a variable and dividing by the number of values. For example, the arithmetic mean of 3,5 , and 10 is 18 divided by 3 , or 6 . Also called the arithmetic mean.

Median. The midpoint or middle value when a set of values is ranked in order of magnitude; if the number of values is even, the midpoint or average of the two middle values. Acceptable range: $90 \%$ to 110\%

Price-related differential (PRD). The mean divided by the weighted mean. The statistic has a slight bias upward. Price-related differentials above 1.03 tend to indicate assessment regressivity; price-related differentials below 0.98 tend to indicated assessment progressivity. Acceptable range: 0.98 to 1.03.

Progressivity. See assessment progressivity (regressivity)
Regressivity. See assessment progressivity (regressivity)
Standard deviation (St. Dev). The statistical calculated from a set of number by subtracting the mean from each value and squaring the remainders, adding together these squares, dividing by the size of the sample less one, and taking the square root of the result. When the data are normally distributed, one can calculate the percentage of observations within any number of standard deviations of the mean from normal probability table. When the data are not normally distributed, the standard deviation is less meaningful and should be used with caution.

Weighted mean; weighted average (wtd mean). An average in which the observations are weighted based on some criterion. In ratio studies, the weighted mean is a calculated by weighting the ratios based on their sale prices. A shortcut method is to sum the appraisals or assessments, sum of the sales prices, and divided the first result by the second. (International Association of Assessing Officers, 1990)

## References

International Association of Assessing Officers. (1990). Property Appraisal and Assessment Administration. Chicago: International Association of Assessing Officers.

