

Land Dedication Fee-in-Lieu Analysis – Weld Re-5J School District Western Demographics, Inc. - 9/9/22

Introduction – This report updates the land dedication requirements for Weld Re-5J School District using the same formula that the district has historically used. This formula is commonly used in other rapidly-developing school districts. New values have been used for developed land value based on current samples of recent land sales and current infrastructure costs needed to construct new schools. The updated values propose a fee of **\$2,633.19**. This report identifies specific variables used in the fee calculations and illustrates the updated calculations as proposed by Western Demographics Inc. (Western), an acknowledged expert on the topic in the State of Colorado.

History – The majority of Front Range school districts have had land dedication or fee-in-lieu of land dedication systems for decades. These systems have been adopted by many City and County Jurisdictions and are intended to collect land for school sites or fees to facilitate the purchase of school sites and the provision of other capital needs. Two Colorado school districts (SD27 and Douglas County), have voluntary capital cost recovery fees, which also collect revenue for actual school construction in addition to funds for land acquisition. Given the smaller size of most land developments along the Front Range, the majority of Front Range school districts collect fee-in-lieu instead of receiving school land. This revenue is consolidated so that appropriate sites may be purchased in the best locations to serve student growth needs.

Figure 1 - Sample List of Front Range Districts Collecting Fee-In-Lieu

- Adams 12 (Thornton)
- Aurora Public Schools
 - Boulder Valley
 - Cherry Creek
- Colorado Springs District 11
 - Douglas County
- Poudre School District
- St. Vrain (Longmont)
 - Thompson Valley
- SD27J (Brighton, Thornton)

Figure 2 - Single Family Detached and Single Family Attached Units Under Construction



Current and Proposed Developments in Weld RE-5J – There is a significant amount of active and proposed new development in the Weld RE-5J area during the coming decades. The following table displays new developments slated for Johnstown and Milliken during the next 20 years.

**Figure 3
Weld RE-5J Land Developments - DRAFT - 9/8/22**

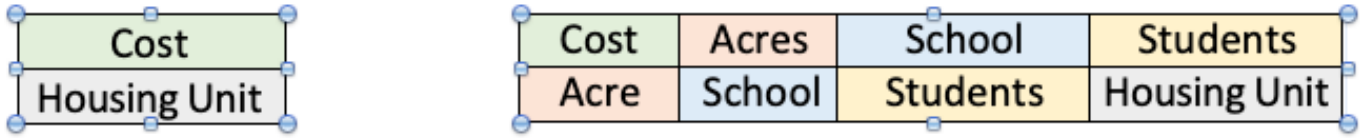
<u>Johnstown</u>	<u>Density</u>	<u>Count</u>	
Mallard Ridge	Detached	263	
Mallard Ridge	Townhome	138	
Mallard Ridge	Apartment	208	
Johnstown Farms	Detached	241	
Great Plains Village (Granary)	Detached	1039	
Great Plains Village (Granary)	Townhome	1115	
Keto / Maplewood Estates	Detached	<u>960</u>	
Subtotal		3964	
<u>Milliken</u>	<u>Density</u>	<u>Count</u>	<u>Acres</u>
Brookstone	Townhome	64	
Lot Holdings - Sunfield (IV)	Detached	86	150
Lot Holdings - Pheasant Hills (VI, VII)	Detached	?	257
Lot Holdings - Prairie Sky (VIII)	Detached	625	360
Lot Holdings - Trapper's Village (IX)	Detached	?	38
Lot Holdings - Golf Course (X)	Detached	?	624
Subtotal		775	

Western Demographics Methodology – Western’s formula uses developed land cost which is more consistent with school district needs. Many districts spend millions of dollars to extend roads, water and sewer lines to sites that are not proximate to municipal infrastructure. The cost per acre to convert raw land into developed sites viable for an institutional building adds to the cost of an acre of school land. The majority of front range districts use developed land cost. Western has estimated a cost of **\$126,804** per acre to provide street frontage, water, sewer, storm sewer, electric, gas and telephone / broadband to a site. These cost figures are considered conservative given the recent escalation in the cost of construction which continues to make developing school sites an expensive proposition.

Basics of the Existing Formula – The calculation for school site acreage and cost is relatively simple and includes the following: 1) A land value is collected from comparable sales or appraisal method to establish cost per acre for potential sites; 2) The desired school site size is established to determine the acreage needed; 3) The desired school enrollments are added to establish the number of students that will be housed in a school; and 4) The student yield or average number of students from housing completes the formula.

The following diagram illustrates the variables and how the various units cancel out as the formula is completed and cost per housing unit is established. Residential densities are differentiated based upon the acreages assessed for single family homes, townhomes, apartments and mobile homes.

Figure 4 – Simplified School Site Acreage / Fee Formula



School Size and Student Yield Variables – The school enrollment and preferred site size metrics for Weld RE-5J that have been historically used continue in use in this fee calculation. Student yield statistics have been collected from sampling of existing developments. Mobile home developments are typically the leading producer of students in most Weld County school districts and that trend exists in Weld RE-5J with almost one student produced by each mobile home. There have been very few new mobile home park developments in the past decade.

Figure 5 – School Size Metrics

School Level	Elementary School	Middle School	High School
Desired School Enrollment	640	930	975
Necessary Acreage	10	23	40

Student Yeild Per Dwelling Unit	Elementary School	Middle School	High School	Total
Single Family Detached	0.301	0.148	0.17	0.619
Single Family Attached	0.106	0.053	0.071	0.23
Mobile Home	0.469	0.224	0.306	0.999
Apartment	0.187	0.091	0.123	0.401

Fee-in-Lieu of Land Dedication Calculation – Raw Land - The fee-in-lieu element of the calculation converts the acreage needed per housing unit into a cost per acre of developed land that would support a school. The land sales used for comparable sales were conveyed during the past six years. Given the 9 comparable sites available, an average cost of \$44,559 was obtained. Older sales were inflated to current value at an expected appreciation of five percent per year consistent with land value cost escalation in Colorado and specifically in the Weld County area. Figure 6 illustrates the comparable sales and the calculation of the average raw land cost.

Figure 6
Weld RE-5J - Raw Land Comps - 8-30-22

PARCEL	ACCTTYPE	SALEPRICE	SALEDATE	GIS_Acres	Price_Per_Acre	Prior_Years	Formula_5%	Inflated_Price
95717300025	Agricultural	\$ 650,000.00	1/31/22 0:00	35.6	\$ 18,253.00	0	1	\$ 650,000.00
95717300026	Agricultural	\$ 600,000.00	11/10/21 0:00	35.1	\$ 17,102.00	1	1.05	\$ 630,000.00
95717300027	Agricultural	\$ 650,000.00	10/27/21 0:00	35.5	\$ 18,330.00	1	1.05	\$ 682,500.00
95718400053	Agricultural	\$ 375,000.00	4/14/17 0:00	32.7	\$ 11,482.00	5	1.25	\$ 468,750.00
105718000039	Commercial	\$ 1,000,000.00	6/15/22 0:00	17.2	\$ 58,288.00	0	1	\$ 1,000,000.00
105903000028	Agricultural	\$ 1,164,200.00	6/27/19 0:00	17.1	\$ 68,237.00	3	1.15	\$ 1,338,830.00
105905400014	Agricultural	\$ 2,500,000.00	2/22/22 0:00	40.9	\$ 61,077.00	0	1	\$ 2,500,000.00
105906300040	Agricultural	\$ 3,030,000.00	2/15/19 0:00	33.0	\$ 91,738.00	3	1.15	\$ 3,484,500.00
105912001001	Vacant Land	\$ 950,000.00	5/1/17 0:00	21.0	\$ 45,211.00	5	1.25	\$ 1,187,500.00
	Total	\$ 10,919,200.00	Total	268.0	\$ 40,742.43	Average	Total	\$ 11,942,080.00
	Raw Land		Inflated Average Per Acre		\$ 44,559.07			

Developed Land Cost – \$126,804 / Acre - Details – Developed land costs were calculated using the average costs from RLH Engineering based on current construction projects. Cost data were extracted from RS Means cost estimation manuals for institutional construction and compared to recent local school construction projects including Tointon K-8 Academy (Greeley), Roosevelt High School (Johnstown) and ElWell Elementary School (Johnstown). RS Means is the primary cost estimation source used in litigation for change orders and contract disputes in the construction industry. RLH Engineering (a regional authority on Colorado institutional construction costs) collected this data and provided it to Western. Linear footage-based costs in four major categories were converted into the \$126,804 per acre figure.

Figure 7 – Developed Land Data – RLH Engineering - 2022

Utility Service Provider	LF Unit Price from RS Means inflated to 2022 using ENR Inflation Factors	Elementary School (10 Acres)				Middle School / PK8 (25 Acres)				High School (50 Acres)			
		.5 mile service	Road / utilities to 2 side of 10 acre site	Total LF of Infrastructure	Cost for Infrastructure	.5 mile service	Road / utilities to 3 side of 25 acre site	Total LF of Infrastructure	Cost for Infrastructure	.5 mile service	Road / utilities to 4 side of 50 acre site	Total LF of Infrastructure	Cost for Infrastructure
Electrical	\$ 15.00	2,140	1,320	3,460	\$ 51,900	2,140	3,132	5,272	\$ 79,080	2,140	5,904	8,044	\$ 120,660
Gas	\$ 20.00	2,140	1,320	3,460	\$ 69,200	2,140	3,132	5,272	\$ 105,440	2,140	5,904	8,044	\$ 160,880
Telephone / Data	\$ 10.00	2,140	1,320	3,460	\$ 34,600	2,140	3,132	5,272	\$ 52,720	2,140	5,904	8,044	\$ 80,440
Water	\$ 45.00	2,140	1,320	3,460	\$ 155,700	2,140	3,132	5,272	\$ 237,240	2,140	5,904	8,044	\$ 361,980
Sewer	\$ 40.00	2,140	1,320	3,460	\$ 138,400	2,140	3,132	5,272	\$ 210,880	2,140	5,904	8,044	\$ 321,760
Stormwater	\$ 50.00	2,140	1,320	3,460	\$ 173,000	2,140	3,132	5,272	\$ 263,600	2,140	5,904	8,044	\$ 402,200
Roads	\$ 350.00	2,140	1,320	3,460	\$ 1,211,000	2,140	3,132	5,272	\$ 1,845,200	2,140	5,904	8,044	\$ 2,815,400
Cost per LF for Infrastructure	\$ 530.00	2,140	1,320	3,460	\$ 1,833,800	2,140	3,132	5,272	\$ 2,794,160	2,140	5,904	8,044	\$ 4,263,320

Average Cost/Acre for \$ 126,804

Cost per Acre \$ 183,380

Cost per Acre \$ 111,766

Cost per Acre \$ 85,266

Fee-in-Lieu of Land Dedication Calculation – The fee-in-lieu calculation for Weld Re-4 School District is shown in the following table.

Figure 8 – LPSD Fee-in-Lieu of Land Development Fee Basis

Johnstown-Milliken RE5J School District - Initial Land Dedication Fee-In_Lieu Calculations - DRAFT				
Western Demographics, Inc. - 9/9/19 - Scenario #1				
Cost Element	Elementary School	Middle School	High School	Totals
A1 - Students per School - (SFD)	640	930	975	
A2 - Johnstown-Milliken RE5J SD Student Yeild Per SFD Dwelling Unit	0.301	0.148	0.170	0.619
A3 - Site Acreage by Level	10.0	23.0	40.0	
A4 - Developed Land Cost	\$171,681	\$171,681	\$171,681	
A5 - Cost Per Unit by Level - SFD	\$ 807.44	\$ 628.39	\$ 1,197.37	\$ 2,633.19
B2 - Johnstown-Milliken RE5J SD Student Yeild Per Single Family Attached Dwelling Unit	0.106	0.053	0.071	0.230
B5 - Cost Per Unit by Level - SFA	\$ 284.35	\$ 225.03	\$ 500.08	\$ 1,009.45
F2 - Johnstown-Milliken RE5J SD Student Yeild Per Mobile Home Dwelling Unit	0.469	0.224	0.306	0.999
F5 - Cost Per Unit by Level - MANUF HM	\$ 1,258.10	\$ 951.08	\$ 2,155.26	\$ 4,364.43
G2 - Johnstown-Milliken RE5J SD Student Yeild Per Apartment Unit	0.187	0.091	0.123	0.401
G5 - Cost Per Unit by Level - APT	\$ 501.63	\$ 386.37	\$ 866.33	\$ 1,754.33
Raw Land Cost / Acre Based on 10 Recent Sales - With Annual Inflation				\$44,877
Infrastructure Cost / Acre - Categories and Average				
Electrical				
Gas	Costs Based on Samples			Samples
Telephone / Data	Average Cost Per Acre - Elementary		\$183,380	EIWell ES
Water	Average Cost Per Acre - Middle		\$111,766	Tointon K-8
Sewer	Average Cost Per Acre - High School		\$85,266	Roosevelt HS
Stormwater				
Roads		Average Cost - Basic Infrastructure		\$ 126,804
Developed Land Cost Including Basic Infrastructure				\$171,681

Land Dedication Acreage Calculation ---- The methodology to obtain the land dedication acreage (as opposed to the fee) is illustrated in the following table.

Figure 9 – Land Dedication Acreage

Weld RE-5J School District - Land Dedication Acreage Calculations Western Demographics, Inc. - 9/8/22 - Scenario #1				
Calculation Element	Elementary School	Middle School	High School	Totals
A1 - Students per School - (SFD)	640	930	975	
A2 - Weld RE-5J SD Student Yeild Per SFD Dwelling Unit	0.30	0.15	0.17	0.6190
A3 - Site Acreage by Level	10.0	23.0	40.0	
A6 - Acreage Per Unit by Level - SFD	0.0047	0.0037	0.0070	0.0153
B2 - Weld RE-5J SD Student Yeild Per CD/TH/Duplex Dwelling Unit	0.11	0.05	0.07	0.2300
B6 - Acreage Per Unit by Level - CD/TH/Duplex	0.0017	0.0013	0.0029	0.0059
F2 - Weld RE-5J SD Student Yeild Per Manufactured Home Dwelling Unit	0.47	0.22	0.31	0.9990
F6 - Acreage Per Unit by Level - MANUF HM	0.0073	0.0055	0.0126	0.0254
G2 - Weld RE-5J SD Student Yeild Per Apartment Unit	0.19	0.09	0.12	0.4010
G6 - Acreage Per Unit by Level - APT	0.0029	0.0023	0.0050	0.0102

Adjacent Districts – The other Weld County school districts close to RE-5J are collecting fees that are close to the \$2,633.19 fee proposed for single family homes.

Figure 10

District	SFD Fee
Weld RE-2 (Eaton)	\$ 2,253
Weld RE-3J (Keenesburg / Lochbuie / Hudson)	\$ 2,235
Weld RE-4 (Windsor / Severance)	\$ 2,916
Weld RE - 6 (Greeley-Evans)	\$ 2,498
Weld RE-7 (Platt Valley / Kersey)	\$ 1,723

Conclusion – An average fee per single family detached unit of \$2,633.19 is reasonable given the various costs faced by Weld Re-5J School District as it continues to provide high quality school facilities for its students and families. This report confirms that this proposed fee uses reasonable, updated variables and a methodology consistent with common practice in the State of Colorado. The revenue collected will greatly assist the district with its efforts to construct needed schools as the community continues to grow.