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Memorandum

To: Beacon Views LLC; City of Beacon Planning Board
From: AKRF, Inc. (Peter Feroe, AICP)
Date: August 21, 2019
Re: Beacon Views Townhouse Development: School Impact Analysis

A. INTRODUCTION

AKRF, Inc. has prepared detailed analyses relating to the potential for public school-age children to live in a proposed 42-unit attached townhome development (the “Proposed Project”) to be located off Conklin Street in the City of Beacon, New York (the “Project Site”). The Project Site comprises one parcel, tax block and lot 331123-0.

The Proposed Project will be a high-end development with 42 owner-occupied 3-bedroom attached townhouse style units. Beacon Views LLC (the “Applicant”) estimates that the units will be priced at approximately \$375,000 to \$400,000 each.

The Proposed Project requires Site Plan approval from the City of Beacon Planning Board. As such, the Proposed Project is required to comply with the State Environmental Quality Review Act (SEQRA) and its implementing regulations (6 NYCRR Part 617). AKRF understands that, as part of the SEQRA review, the City of Beacon would evaluate the potential impacts of the Proposed Project to the Beacon City School District (“Beacon CSD” or, the “District”).

This memorandum analyzes the potential for the Proposed Project to result in school-age children attending the Beacon CSD and any potential impact to the District.

B. POTENTIAL SCHOOL-AGE CHILDREN GENERATION

I. METHODOLOGY

There are two primary methods used by planners to estimate the number of public school-age children (PSAC) that may live within a particular project.

1. Use of a “multiplier” of the number of PSAC per housing unit based on US Census data and specific to housing unit type, size (e.g., bedroom count), and value; and
2. Use of case study data obtained from local school districts for the number of registered public school students per address for representative developments.

Both approaches have limitations related to quality and age of data, and must be seen as approximations of the number of actual school-age children that may live at a project. However, both methods are widely used by communities as an effective method for anticipating potential effects of new development.

Multiplier

For more than a decade, the standard multiplier used to estimate project-generated PSAC was the Rutgers University's Center for Urban Policy Research (CUPR) 2006 "multipliers" based on 2000 Census data (the "Rutgers Study"). Specifically, CUPR queried the Public Use Microdata Sample (PUMS) from the 2000 Census to determine the population characteristics of various types of housing. The population characteristics queried included average household size, number of PSAC, and number of PSAC by grade range. The housing characteristics queried included the state of residence, housing tenure (i.e., owner or renter), housing size (e.g., number of bedrooms), housing type (e.g., single- or multi-family), and housing price. Only housing built between 1990 and 2000 was queried. Based on these queries, CUPR published a series of state-specific tables that included various population characteristics, including the number of PSAC for various types and sizes of housing. These became known as the "Rutgers" multipliers. Today, these multipliers are widely viewed as overly conservative (i.e., that they predict many more public school children will reside in new developments than is actually observed) based on several reasons, including the fact that data from New York City skew the multipliers unnecessarily high. Nevertheless, these multipliers are still commonly used by communities throughout the region and, as such, AKRF has included an estimate of the number of school age children that may live at the Proposed Project based on these multipliers.

Case Study

To augment the use of the Rutgers multipliers, AKRF has requested data from the Beacon CSD for similarly sized and programmed attached townhome developments within the District. This data will be used to develop Beacon CSD specific estimates of the number of PSAC that may live within the Proposed Project. As of the date of this memo, enrollment data has not been received from the District. When the information becomes available, AKRF will update this memorandum with that information in connection with the SEQRA review of the Proposed Project.

II. ANTICIPATED NUMBER OF SCHOOL AGE CHILDREN

Multiplier

As stated above, the Rutgers study provides PSAC multipliers based on the type of unit (e.g., detached, attached, multi-family), the size of the unit (e.g., number of bedrooms), and the value of the housing unit in 2005. As shown in Table 3-1 of the Rutgers Study (**Appendix 1**), the PSAC multipliers vary significantly based on the value of the unit. Housing values in the Rutgers Study are arrayed by terciles (i.e., thirds) and are based on housing prices in 2005. AKRF adjusted these 2005 home values to present day values using data from the U.S. Federal Housing Finance Agency. Between 2005 and 2018, housing values in New York State rose approximately 24 percent.¹ Therefore, the 2005 housing value of \$269,500 (i.e., the lower bound of the top tercile of 3-BR attached houses) would be approximately \$334,180 in 2019 dollars. With an estimated housing cost of \$375,000 to \$400,000 per unit, the Proposed Project townhouses would be well within the top tercile of townhouse values in New York State.

Therefore, AKRF applied the top tercile (>\$269,500) multiplier for single-family attached houses with 3-bedrooms, which is 0.28 PSAC per unit. Using this multiplier, it is estimated that there would be 12 PSAC living in the Proposed Project (see **Table 1**).

¹ U.S. Federal Housing Finance Agency, All-Transactions House Price Index for New York State [NYSTHPI], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/ATNHPIUS36027A>, August 7, 2019.

Table 1

Anticipated Number of Public School Age Children Based on Rutgers Data

Type of Unit	Number of Townhouse Units	More than \$269,500*	
		Multiplier	Number PSAC
3-BR Single-Family Attached	42	0.28	12
TOTAL	42		12
Notes: Bedroom (BR) Sources: * Rutgers University Center for Urban Policy Research; New York (3-1) All Public School Children: School-Age Children in Public School (PSAC); Single-Family Attached, 3 BR; More than \$269,500			

C. BEACON CITY SCHOOL DISTRICT

The Beacon City School District operates six schools, including four regional elementary schools, one middle school, and one high school:

1. South Avenue Elementary School (PK, K-5)
2. Glenham Elementary School (PK, K-5)
3. J.V. Forrestal Elementary School (PK, K-5)
4. Sargent Elementary School (PK, K-5)
5. Rombout Middle School (6-8)
6. Beacon High School (9-12)

I. ENROLLMENT

As presented in **Table 2** below, for 2018 school year, the Beacon City School District has a total enrollment of 2,948 students (pre-K to 12th grade).² This is a 20 percent decline in total enrollment since Beacon CSD's peak of 3,708 students in 2004. The 2018 enrollment is approximately the same as Beacon CSD's enrollment 1993 (2,935 students). Cornell's Program on Applied Demographics predict that enrollment in the Beacon CSD will continue to decline, estimating a loss of 285 to 519 students by 2028.³

² Cornell Program on Applied Demographics. Pad.human.cornell.edu/schools/enrollment.cfm.

³ Cornell Program on Applied Demographics. Pad.human.cornell.edu/schools/projections.cfm.

Table 2
Beacon City School District Enrollment

Year	Enrollment (K-12)	Decrease from Peak Enrollment
2004	3,708	--
2005	3,633	-2%
2006	3,484	-6%
2007	3,364	-9%
2008	3,378	-9%
2009	3,443	-7%
2010	3,433	-7%
2011	3,368	-9%
2012	3,253	-12%
2013	3,190	-14%
2014	3,111	-16%
2015	2,997	-19%
2016	2,923	-21%
2017	2,950	-20%
2018	2,948	-20%

Notes: The most recent peak enrollment occurred in 2004.
Sources: Cornell Program on Applied Demographics.

II. BUDGET

Beacon CSD has a budget of \$73,563,000 for the 2019-2020 school year, which is a 4.3 percent increase from the 2018-2019 school year and an 18.3 percent increase from the 2013-2014 school year (see **Table 3**). For the 2019-2020 school year, Beacon CSD expects to receive \$29,474,648 in State Aid, which is 40.0 percent of the total expected revenue. As such, the District must raise 60 percent of its budget from the Tax Levy, reserve funds, and miscellaneous revenue sources (e.g., building rental) (see **Table 4**).⁴

The District breaks down their budget into three parts: administrative, instructional, and capital. For the 2019-2020 budget, the District has allocated \$55,251,312, or 75.1 percent, for its instructional budget, which includes transportation. Using the 2018 enrollment figure above, that equates to a per student instructional cost of approximately \$18,742.

Beacon CSD current approved capital projects include health and safety upgrades, building repairs, renovations to classrooms for new technologies, and construction of a turf field.⁵ No building or facility expansion are planned.

⁴ <https://www.beaconk12.org/cms/lib/NY01813524/Centricity/Domain/418/Budget%20Presentation%202019-20.pdf>

⁵ <https://www.beaconk12.org/domain/437>

Table 3
Historical Budget for Beacon City School District

Year	Total Budget
2013-2014	\$62,185,000
2014-2015	\$64,625,000
2015-2016	\$66,250,000
2016-2017	\$66,750,000
2017-2018	\$68,625,000
2018-2019	\$70,520,000
2019-2020	\$73,563,000
Sources: Beacon City School District (www.beaconcityk12.org)	

Table 4
2019-2020 Beacon CSD Budget Detail

	Source / Use	Budget	Percentage of Total
Expenses	Administrative	\$7,086,808	9.6%
	Instructional	\$55,251,312	75.1%
	Capital	\$11,224,880	15.3%
	Total Expense	\$73,563,000	100%
Revenue	Tax Levy	\$40,338,152	54.8%
	State Aid	\$29,474,648	40.1%
	Reserve / Fund Balance	\$2,700,200	3.7%
	Miscellaneous	\$1,050,000	1.4%
	Total Revenue	\$73,563,000	--
Sources: Beacon City School District. Budget Presentation 2019-2020 and Proposed Budget.			

D. ESTIMATE OF FUTURE SCHOOL TAX GENERATION

The Project Site has a current assessed value of \$301,000. The 2019 Beacon CSD mill rate for non-homestead properties is 21.47.⁶ Therefore, the Project Site currently pays \$6,462 per year in school taxes.

As stated above, the Applicant is proposing a high-end, owner-occupied townhouse development and estimates that the market value of the townhouses would be approximately \$375,000 to \$400,000.⁷ The 2019 Beacon CSD mill rate for homestead properties is 15.78.⁸ Therefore, the Proposed Project would generate approximately \$248,535 to \$265,104 in property taxes for the Beacon CSD {15.78 x 375 x 42 = \$248,535; 15.78 x 400 x 42 = \$265,104}, which is an increase of \$242,072 to \$258,642 from existing conditions (see **Table 5**).

E. CONCLUSION

The Proposed Project would generate a total of \$439,583 to \$468,888 in annual property tax revenue for the four taxing jurisdictions that serve the Project Site, including Dutchess County, the City of Beacon,

⁶ <https://www.dutchessny.gov/Departments/Real-Property-Tax/Docs/tax-rates-2019.pdf>

⁷ Properties in Beacon are assessed at 100% of their market value.

⁸ <https://www.dutchessny.gov/Departments/Real-Property-Tax/Docs/tax-rates-2019.pdf>

Beacon CSD, and the Howland Library District. This is an increase of \$428,169 to \$457,474 in property tax revenue from what is currently generated by the Project Site (see **Table 5**).

The potential financial surplus to the Beacon CSD is discussed below. With respect to the other three taxing jurisdictions, the County, Library, and City, it is the Applicant's opinion that the relatively small number of residents that would live in the Proposed Project would be unlikely to result in a significant increase in costs related to the provision of services. The roads within the Proposed Project would be private, and a homeowner's association would be created to assume maintenance responsibility for the Project's shared land and infrastructure. Therefore, it is the Applicant's opinion that the Proposed Project would result in a surplus in revenue to the various taxing jurisdictions.

Table 5
Property Tax Payments of the Proposed Project

Taxing Jurisdiction	Current Property Tax Payment*	Tax Rate (Homestead)	Total Project Tax Revenue**	Increase in Tax Revenue from Current Condition
County	\$1,038	3.45	\$54,338 - \$57,960	\$53,299 - \$56,922
City	\$3,735	8.25	\$129,938 - \$138,600	\$126,202 - \$134,865
Beacon CSD	\$6,462	15.78	\$248,535 - \$265,104	\$242,072 - \$258,642
Howland Library District	\$178	0.43	\$6,773 - \$7,224	\$6,595 - \$7,046
Total	\$11,414	27.91	\$439,583 - \$468,888	\$428,169 - \$457,474
Notes: * Current Property Tax Payment based on the Project Site's current assessed value of \$301,000 and non-homestead tax rates for the City, School District, and Library District ** Range based on estimated value of \$375,000-\$400,000 per unit.				

As shown above, the Beacon CSD has experienced declining enrollment for the past 15 years. Since 2004, the District's enrollment has shrunk by 20 percent, or 760 students. Projections indicate that this decline is likely to continue for the next decade. The District's current capital projects are focused on maintaining a state of good repair and modernizing classrooms; they are not focused on expanding capacity to meet enrollment needs. Therefore, it is unlikely that the addition of 12 PSAC to the Beacon CSD, as estimated in this memorandum, would adversely affect the capacity of the District's facilities.

Based on the estimated 12 PSAC, the Proposed Project could be expected to add approximately \$224,904 in annual expenses to the Beacon CSD {18,742 x 12 = 224,904}. As stated above, State Aid accounts for approximately 40 percent of the revenue for the Beacon CSD, with the remaining 60 percent being funded by the tax levy and the fund balance. Therefore, the actual cost to Beacon CSD taxpayers for the potential addition of 12 PSAC is approximately \$134,942 {224,904 x 60% = 134,942}. In this scenario, the Proposed Project would result in a surplus to the Beacon CSD of approximately \$107,130 to \$123,699 per year (see **Table 6**).

Table 6
Projected Fiscal Impact to the Beacon CSD

Methodology	Estimated Number of PSAC	Instructional Cost per Student	Total Instructional Cost (Project)	Instructional cost Attributable to Property Tax (60%)	Estimated Increase in Project Property Taxes	Surplus to Beacon CSD
Rutgers	12	\$18,742	\$224,904	\$134,942	\$242,073 - \$258,642	\$107,130 - \$123,699
Case Study	*To be updated upon receipt of case study data					

It can therefore be concluded that the conservative estimate of twelve (12) PSAC that might be generated from the Proposed Project would not result in a significant adverse impact, and the Project will generate a substantial annual tax revenue surplus for the District.

Appendix 1

**NEW YORK (3--1) ALL PUBLIC SCHOOL CHILDREN:
SCHOOL-AGE CHILDREN IN PUBLIC SCHOOL (PSAC)**

STRUCTURE TYPE /BEDROOMS/ VALUE (2005)/TENURE	TOTAL PSAC	PUBLIC SCHOOL GRADE				
		K-2	3-6	7-9	10-12	Gr. 9 Only
Single-Family Detached, 2 BR						
All Values	0.27	0.07	0.09	0.07	0.04	0.02
Less than \$106,000	0.32	0.08	0.10	0.09	0.06	0.03
\$106,000 to \$164,500	0.26	0.07	0.10	0.06	0.03	0.03
More than \$164,500	0.21	0.07	0.07	0.05	0.02	0.02
Single-Family Detached, 3 BR						
All Values	0.64	0.18	0.22	0.14	0.10	0.05
Less than \$135,000	0.79	0.21	0.27	0.18	0.13	0.05
\$135,000 to \$194,500	0.63	0.18	0.22	0.13	0.10	0.05
More than \$194,500	0.50	0.14	0.17	0.11	0.08	0.04
Single-Family Detached, 4 BR						
All Values	1.00	0.25	0.36	0.23	0.17	0.07
Less than \$224,500	1.15	0.25	0.41	0.27	0.23	0.09
\$224,500 to \$329,500	0.98	0.27	0.34	0.22	0.16	0.06
More than \$329,500	0.87	0.24	0.32	0.19	0.11	0.05
Single-Family Detached, 5 BR						
All Values	1.23	0.29	0.41	0.28	0.24	0.10
Less than \$329,500	1.48	0.30	0.45	0.41	0.32	0.17
\$329,500 to \$748,500	1.14	0.26	0.40	0.24	0.23	0.08
More than \$748,500	1.03	0.34	0.38	0.17	0.14	0.06
Single-Family Attached, 2 BR						
All Values	0.17	0.06	0.05	0.03	0.03	0.01
Less than \$135,000	0.23	0.08	0.07	0.04	0.04	0.02
\$135,000 to \$194,500	0.18	0.06	0.06	0.03	0.04	0.01
More than \$194,500	0.11	0.03	0.03	0.03	0.02	0.02
Single-Family Attached, 3 BR						
All Values	0.52	0.11	0.19	0.11	0.11	0.03
Less than \$164,500	0.69	0.15	0.28	0.12	0.13	0.05
\$164,500 to \$269,500	0.54	0.11	0.18	0.12	0.13	0.03
More than \$269,500	0.28	0.06	0.10	0.08	0.05	0.03
Single-Family Attached, 4 BR						
All Values	0.86	0.11	0.31	0.23	0.21	0.06
Less than \$224,500	0.98	0.17	0.35	0.25	0.20	0.08
\$224,500 to \$329,500	0.92	0.06	0.32	0.27	0.27	0.07
More than \$329,500		Insufficient Sample				
5+ Units--Own, 1 BR						
All Values	0.15	0.05	0.07	0.01	0.02	0.00
Less than \$164,500	0.18	0.06	0.08	0.04	0.00	0.00
\$164,500 to \$269,500	0.16	0.06	0.08	0.00	0.03	0.00
More than \$269,500	0.10	0.02	0.05	0.00	0.04	0.00
5+ Units--Own, 2 BR						
All Values	0.09	0.02	0.04	0.02	0.01	0.01
Less than \$135,000	0.00	0.00	0.00	0.00	0.00	0.00
\$135,000 to \$329,500	0.15	0.05	0.06	0.02	0.03	0.02
More than \$329,500	0.05	0.00	0.03	0.02	0.00	0.00
5+ Units--Own, 3 BR						
All Values	0.49	0.10	0.07	0.14	0.19	0.06
Less than \$224,500		Insufficient Sample				
\$224,500 to \$748,500		Insufficient Sample				
More than \$748,500		Insufficient Sample				