

The Edgewater

School Impact Study



June 26, 2017



I. INTRODUCTION:

Cleary Consulting has been retained by Scenic Beacon Developments, LLC to conduct a school impact assessment study documenting the potential impacts of the proposed Edgewater residential development on the Beacon City School District. The school impact assessment study quantifies the increased number of school age children resulting from the development along with the associated incremental costs to accommodate the additional school district enrollees. This document provides a detailed description of the study methodology, analysis and findings.

II. THE EDGEWATER RESIDENTIAL DEVELOPMENT

Scenic Beacon Developments, LLC is proposing the development of a new transit oriented development consisting of seven multi-family buildings on a 12-acre parcel of land containing 307 dwelling units. The site fronts on Tompkins Avenue and is located approximately ¼ mile from the Beacon MetroNorth train station (Figure 1 – Site Location Map, Figure 2 – Site Aerial Photograph, Figure 3 –Site Plan).

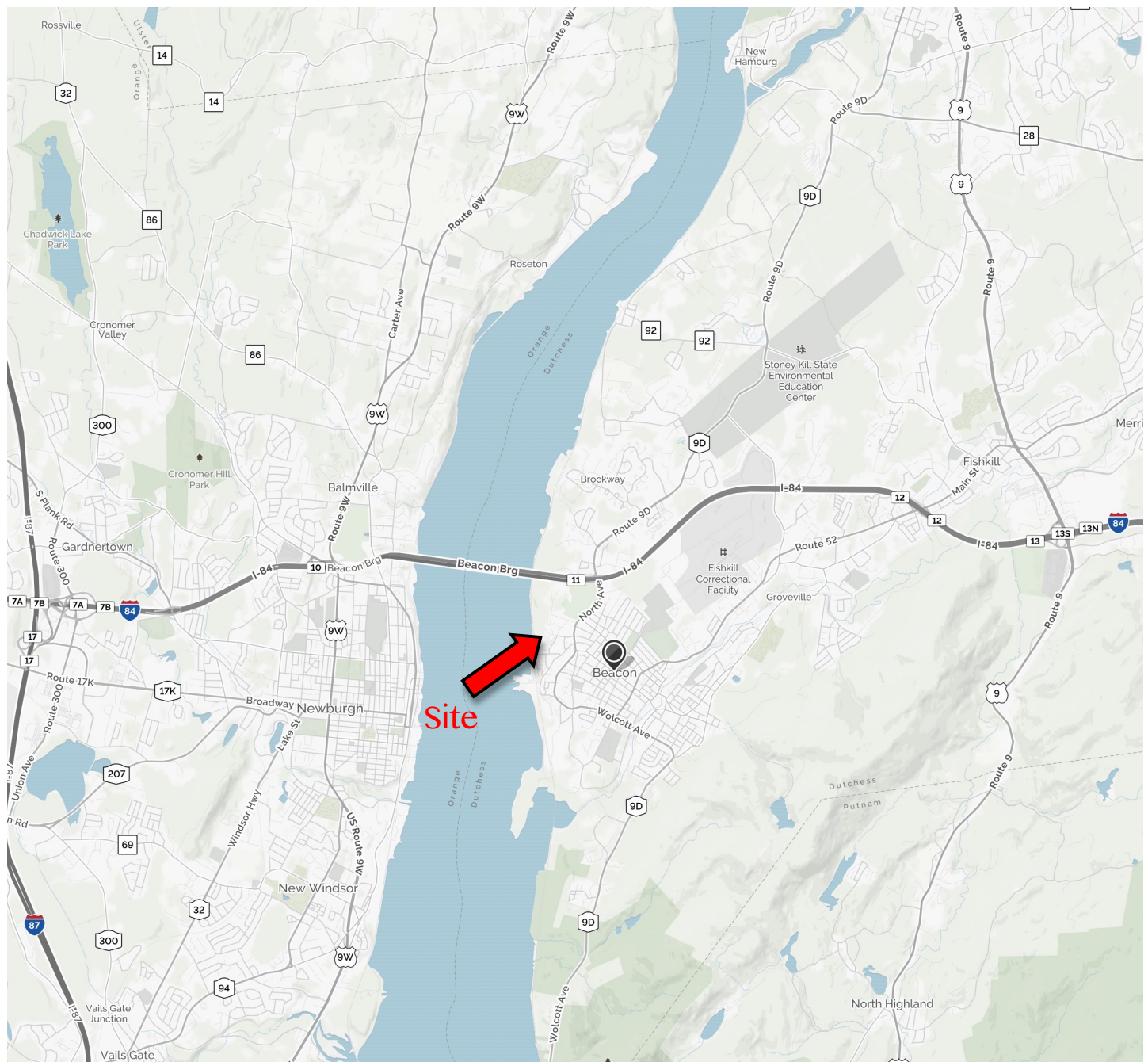
The 307 dwelling units are composed of the following unit mix:

Studios	96 units
1 Bedroom	115 units
2 Bedroom	86 units
3 Bedroom	<u>10 units</u>
	307 units

The project has been designed and configured to most appropriately meet the needs of single tenants, couples (ideally the millennial market) and empty nesters. The proximity of the project to the central business district and the train station will prove particularly attractive to these market niches. While families with young children will not be prohibited from the project, the project does not offer the types of amenities typically sought after by families, therefore making it a less attractive housing choice for families with children when compared to other existing housing options within the City of Beacon and surrounding area.

III. TRANSIT ORIENTED DEVELOPMENT – THE FACTS:

Transit oriented development (TOD) is an increasingly popular type of [urban development](#) that maximizes the amount of vibrant, well planned and designed mixed uses (multi-family residential, retail, service, restaurant and entertainment, etc.) within [walking](#) distance of a [public](#) transit stop (such as a [train station](#), or [light rail](#) or [bus](#) stop). TOD projects are more compact, less sprawling, pedestrian friendly, use municipal infrastructure more efficiently, reduce auto dependency and resulting traffic generation, enhance economic prosperity and importantly, place less of a burden on local schools.



Scale: N.T.S.



Figure 1 Site Location Map





Scale: N.T.S.



Figure 2
Site Aerial Photograph





Beacon Developments, LLC
Street
2508

Architect:
Aryeh Siegel, Architect
514 Main Street
Beacon, New York 12508

Site / Civil Engineer:
Hudson Land Design
174 Main Street
Beacon, New York 12508

Surveyor:
TEC Land Surveying, P.C.
15C Ticonderoga Avenue
Beacon, New York 12508

Landscape Designer:
Landscape Restorations
P.O. Box 286
Beacon, New York 12508

Scale: N.T.S.



Figure 3
The Edgewater - Site Plan

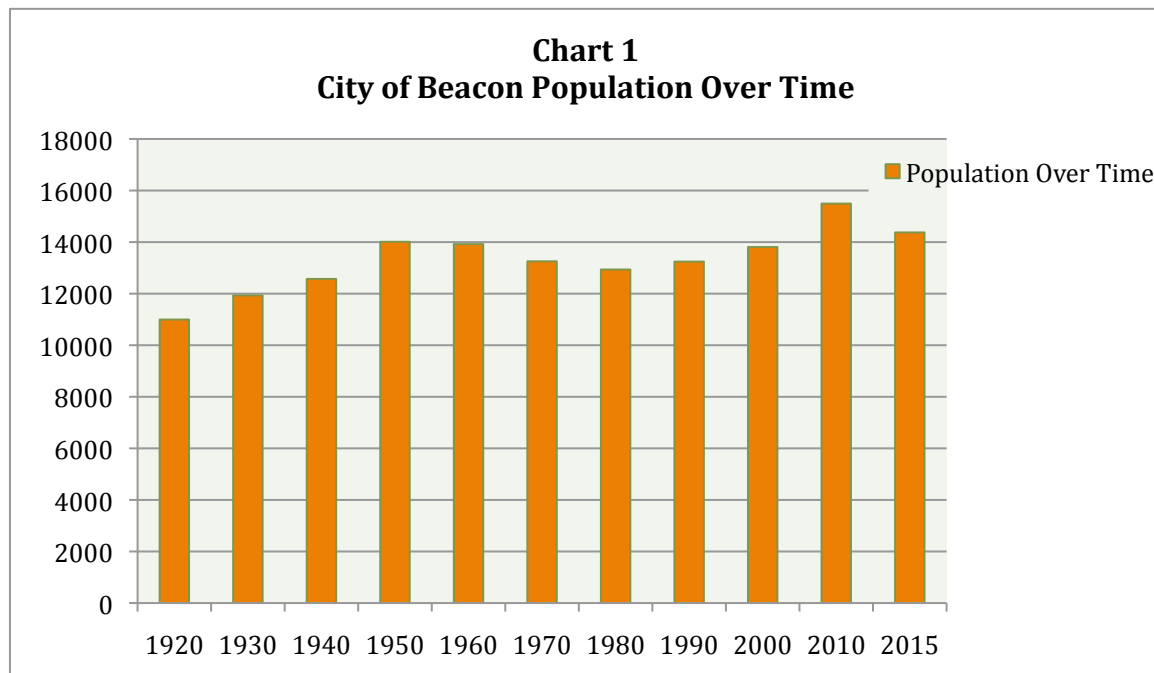


Extensive empirical data accumulated over several decades document these trends. For example, a report released by the Urban Land Institute¹ studied 10,000 apartments across the Washington DC-Baltimore metro region to determine the impact of TOD projects on public services. The study found that far fewer families with school-aged children live in TOD projects. In terms of their fiscal impact, TOD projects generate between \$1.13 and 2.20 per year in tax revenue for every \$1 spent on public services (including school costs), compared to between \$0.77 and \$1.35 for every \$1 spent for more traditional, non TOD developments.

To reinforce the fact that TOD projects tend to generate far fewer school-aged children than traditional residential housing developments, The US Census, American Housing Survey² found that on average, nation-wide, there are 64 school-age children generated for every 100 new owner-occupied single-family homes, but just 21 children for every 100 new traditional multi-family apartments. TOD projects generate even fewer children, an average of just 12 children for every 100 apartments.

III. CITY OF BEACON DEMOGRAPHIC PROFILE:

The population of the City of Beacon increased gradually to the 1950's and 1960's before declining slightly through the latter half of the 20th century, where it thereafter rebounded to its peak of 15,494 in 2010. The past few years have seen the beginning of another decline in population (Chart 1).

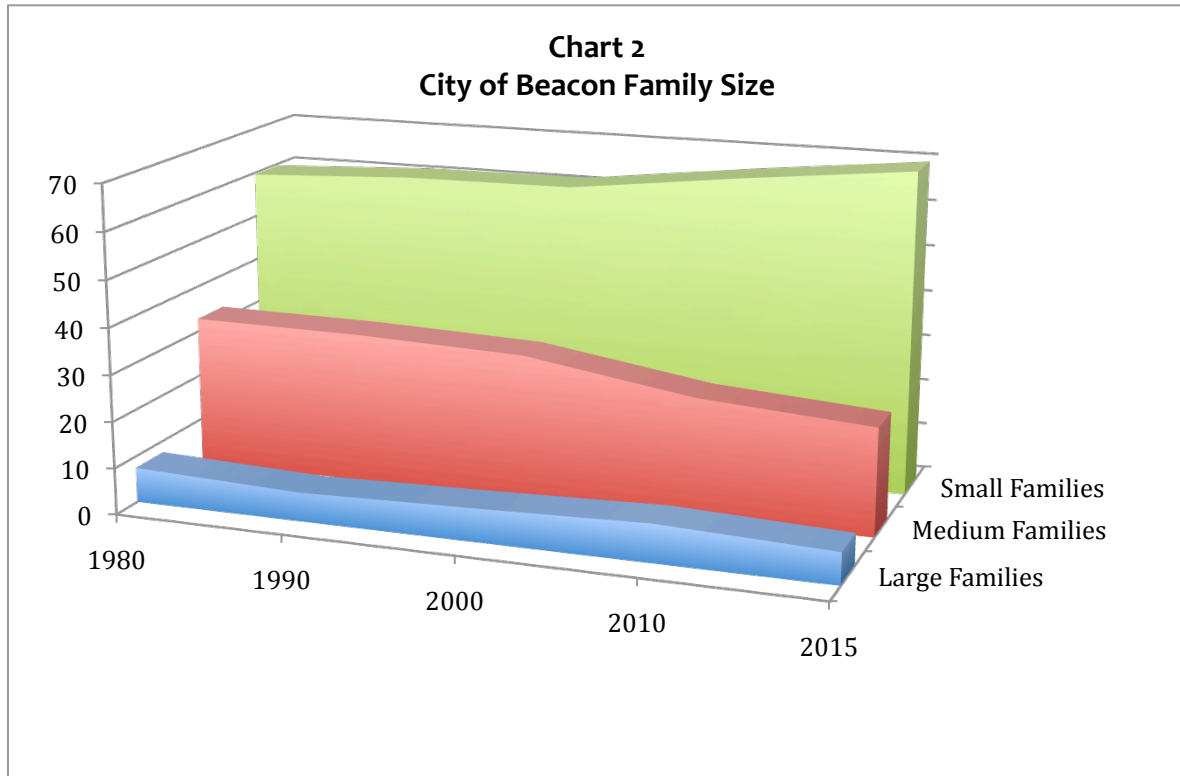


Source: US Census Bureau

¹ Fiscal Impacts of Transit Oriented Development Projects, Urban Land Institute, December 2016.

² US Census Bureau, American Housing Survey, 2015.

This decline in population correlates directly with the trend of decreasing family size. The number of small families (containing 1 – 3 members) has increased in the City of Beacon by over 10% since 1970 when compared to medium families (4 – 5 members) and large families (6+ members) (Chart 2).

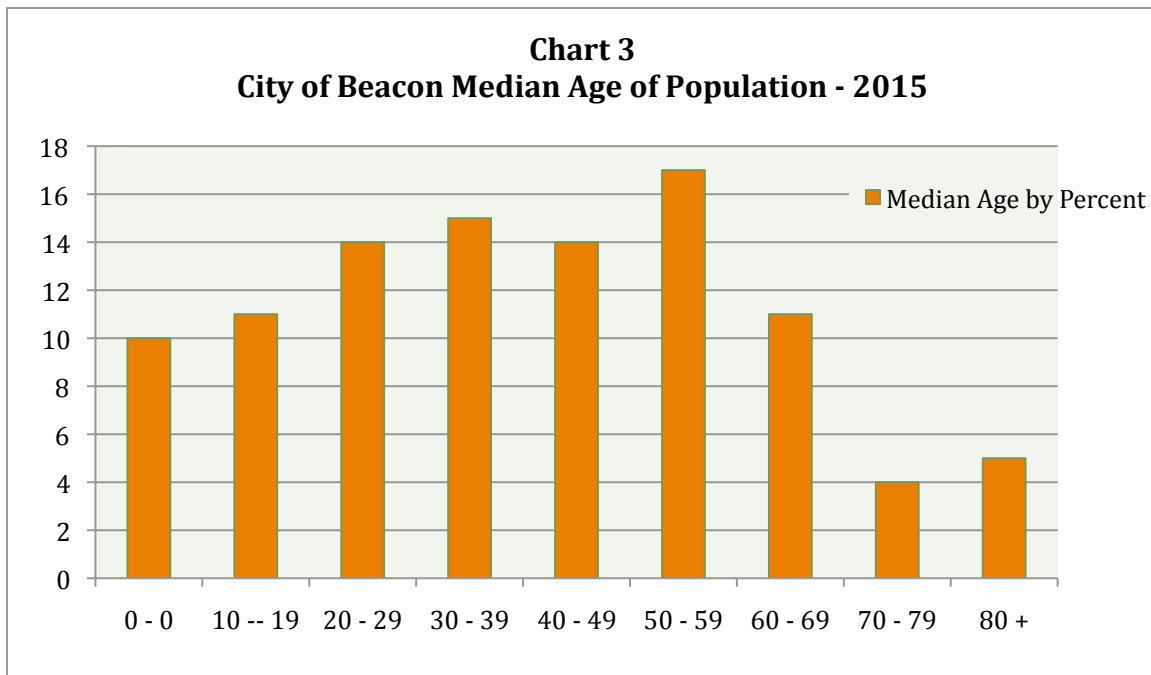


Source: US Census Bureau

According to the US Census Bureau, US household size has a direct inverse correlation to overall population size – at a ratio of almost 1 individual per 100 million citizens. When the US population reached 100 million in 1915 the average household size was 4.5. When the population reached 200 million in 1967 the household size was just over 3 residents. When the 300 million mark was reached in 2006, average household size had decreased to 2.6 people. The trend for smaller households is a function of greater wealth, individuality and mobility. According to the Pew Research Center³ the dramatic shift in household size is attributable to the wide availability of contraceptives, the growth of women’s participation in the work force and the increasing cost of raising kids.

Additionally, consistent with broader trends observed regionally and nationally, the median age of the City’s population has been increasing, and in 2015 was 39.6, which is slightly older than the average for the NY metro region (37.9) as well as New York State as a whole (38.1).

³ Americans Ideal Family Size Is Smaller Than It Used To Be, Pew Research Center, May 2015.



Source: US Census Bureau

Therefore, demographic factors such as declining family size, combined with a declining and ageing population, reinforce the conclusion that the school-age population in the City of Beacon will continue to decrease, even with the development of new housing units. It is once again important to emphasize that new development – designed and configured as transit oriented development – such as The Edgewater, will generate even fewer school-age children than traditional multifamily apartments.

IV. IMPACT OF THE EDGEWATER ON DEMOGRAPHIC PROFILE:

The development of The Edgewater will result in an increase in the City of Beacon's population due to new residents residing within the project.

Employing standard demographic multipliers⁴ the project will result in the generation of a population of approximately 558 residents. This represents an approximately 4% increase in the City's overall population. It is likely that some new tenants in the project already reside in the City, so the actual City-wide population increase will be somewhat less than the 558 residents calculated herein.

⁴ Source: *Residential Demographic Multipliers, Estimates of the Occupants of New Housing by State, Housing Type, Housing Size and Housing Price*; prepared by Robert W. Burchell, David Listokin, William Dolphin, Rutgers University, Center for Urban Policy Research, Edward J. Bloustein School of Planning and Public Policy, June 2006. The multipliers were developed by Robert W. Burchelle and David Listokin, co-authors of the *Development Impact Assessment Handbook* for the Urban Land Institute. The Rutgers study is widely used to project both population and school-aged children.

TABLE 1 PROJECTED NEW RESIDENT POPULATION GENERATED BY THE EDGEWATER DEVELOPMENT			
Unit Type	Number of Units	Population Multiplier	Total Population
Studio	96	1.67	160.32
1 Bedroom	115	1.67	160.32
2 Bedroom	86	2.31	198.66
3 Bedroom	10	3.81	38.1
	307		557.4

III. BEACON CITY SCHOOL DISTRICT:

The proposed Edgewater development is located within the Beacon City School District, which includes all of the City of Beacon, a portion of the Town of Fishkill to the north and a small area of Wappinger.

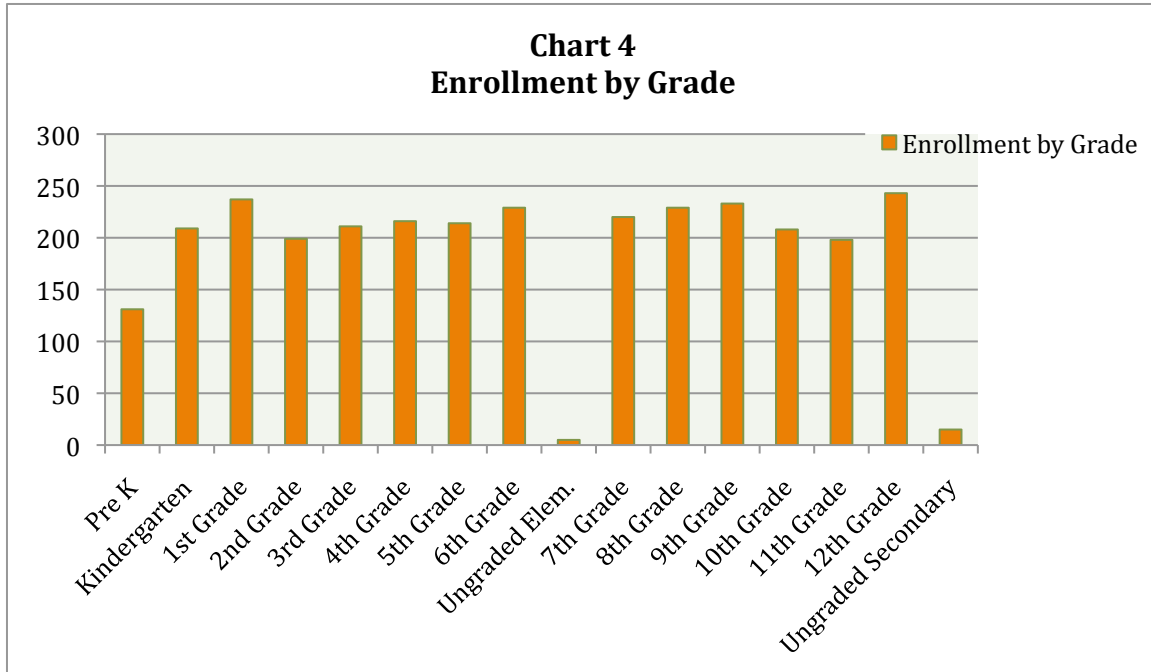
Six schools serve the district: Beacon High School, Rombout Middle School, Glenham School, Sergeant School, South Avenue School and JV Forrestal Elementary School.

Enrollment data for these schools for the 2015 – 2016⁵ academic year is presented in Table 2.

TABLE 2 BEACON CITY SCHOOL DISTRICT ENROLLMENT – 2015 - 2016		
School	Grades	Enrollment
Beacon High School	9 – 12	893
Rombout Middle School	6 – 8	683
Glenham School	PK – 5	379
Sergeant School	PK – 5	331
South Avenue School	PK – 5	323
JV Forrestal Elementary School	PK – 5	257
	Total	2,866

Enrollment by grade is presented in Chart 4

⁵ Data collected from the New York State Education Department's Student Information Repository System (SIRS). Enrollment counts are as of "BEDS" day, which is the first Wednesday in October. Data for the 2016 -2017 is not available from the NYSED.



The enrollment gender breaks down to 49% male and 51% female. 2% of the students in the district are english language learners. 18% are students with disabilities and 51% of the students are economically disadvantaged.

Chart 5 and Table 3 presents enrollments over time, beginning in the 1998 – 1999 school year.

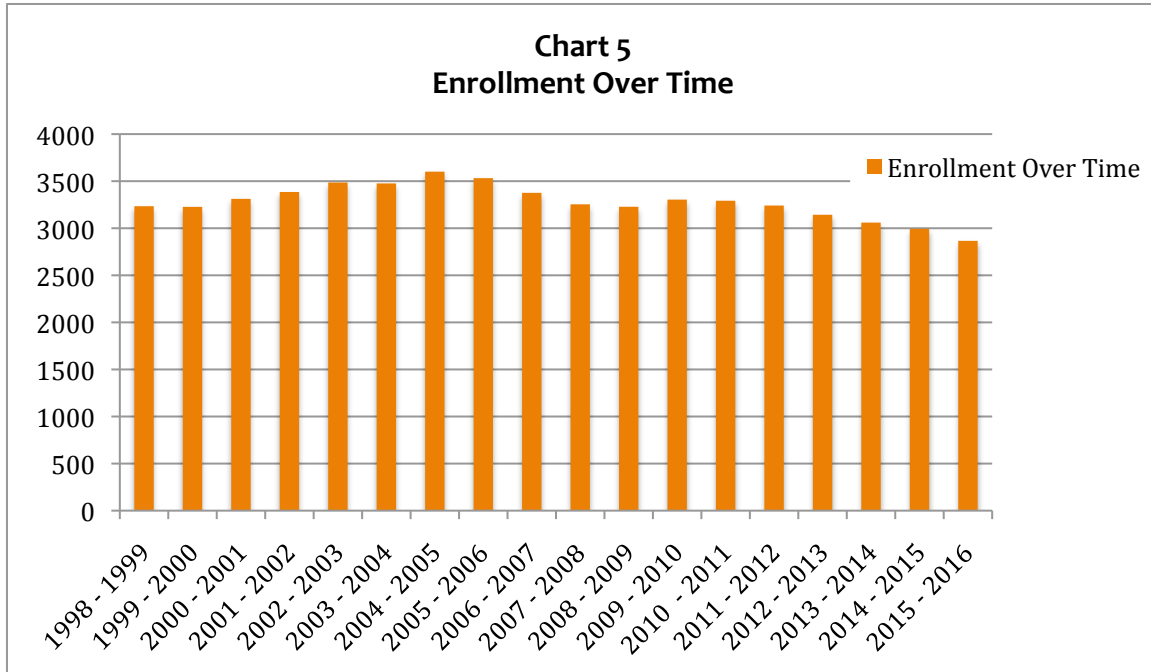


TABLE 3 ENROLLMENTS OVER TIME	
School Year	Enrollment
1998 – 1999	3,234
1999 – 2000	3,227
2000 - 2001	3,312
2001 – 2002	3,385
2002 – 2003	3,486
2003 – 2004	3,476
2004 – 2005	3,601 <i>Peak Enrollment</i>
2005 – 2006	3,532
2006 – 2007	3,376
2007 – 2008	3,254
2008 – 2009	3,228
2009 – 2010	3,304
2010 – 2011	3,292
2011 – 2012	3,241
2012 – 2013	3,143
2013 – 2014	3,060
2014 – 2015	2,994
2015 – 2016	2,866

Enrollment in the district peaked in the 2004 – 2005 academic year at 3,601 students, and has been gradually declining since. The enrollment decline from the peak year of 2004 – 2005 to the current 2015 – 2016 reporting period is 735 students. As the number of housing units in the City has not been reduced, the decline in enrollment can only be attributed to the demographic trends outlined in this report. It can also be logically concluded that additional development would follow similar trends – smaller household sizes and fewer school-age children.

IV. PROJECT GENERATED SCHOOL CHILDREN:

The number of public school age children generated by a residential development is dependent on several variables including housing type, number of bedrooms and rent or sales price. The following is a projection of the total number of public school aged children anticipated from the Edgewater development based on regional demographic multipliers and student generation factors developed by the Rutgers University, Center for Urban Policy Research⁶.

TABLE 4 PROJECTED NUMBER OF SCHOOL AGED CHILDREN GENERATED BY THE EDGEWATER DEVELOPMENT			
Unit Type	Number of Units	Student Multiplier	Public School Students
Studio	96	0.08	7.68
1 Bedroom	115	0.08	9.2
2 Bedroom	86	0.23	19.78
3 Bedroom	10	1.0	10
	307		46.66

School children projections based on the Rutgers University, Center for Urban Policy Research multiplier have been found to be on the conservative side, depicting generally far higher school children generation numbers than actually realized.

To more accurately assess the number of school children generated by the proposed development, an effort was made to review any other large-scale multi-family developments in the City. According to the City's Building Inspector⁷, no other comparable large-scale multi-family developments exist in the City. As a result, no viable source of actual school generation numbers are available. As a result, the far more conservative Rutgers multipliers are utilized for this analysis. Recent research by several agencies and private sources conclude that the Rutgers multiplier

⁶ Source: *Residential Demographic Multipliers, Estimates of the Occupants of New Housing* by State, Housing Type, Housing Size and Housing Price; prepared by Robert W. Burchell, David Listokin, William Dolphin, Rutgers University, Center for Urban Policy Research, Edward J. Bloustein School of Planning and Public Policy, June 2006.

⁷ Telephone conversation, 6/8/17

overestimates the number of school age children generated from multi-family developments, consisting predominantly of 1 and 2 bedroom units, located near transit facilities, by as much as 3 times. So again, the use of the Rutgers multipliers in this analysis presents a very conservative evaluation, which likely over-estimates the number of school age children that will actually reside within The Edgewater.

V. PROJECTED SCHOOL DISTRICT COSTS AND TAX REVENUES:

The Beacon City School District budget for the 2015-2016 academic year was 66,250,000⁸. Based on a total school district enrollment of 2,866 students, the overall cost per student was \$23,116 (Table 5).

TABLE 5		
OVERALL COST PER STUDENT – 2015 - 2016		
2015-1026 Budget (A)	District Enrollment (B)	Cost Per Pupil (A ÷B)
\$66,250,000	2,866	\$23,116

According to the Beacon City School District’s budget, \$36,262,918 or 54.7% of the per student cost is paid by the local tax levy. The remainder of the budget comes from the State or other sources. Table 6 provides the tax levy per student which is paid by the local tax levy.

TABLE 6		
OVERALL COST PER STUDENT PAID BY LOCAL TAX LEVY – 2015 - 2016		
Cost Per Pupil (A)	% of Per Pupil Cost Paid by Local Tax Levy (B)	Tax Levy Per Pupil (A ×B)
\$23,115.84	54.7%	\$12,644

It is important to note that the Beacon City School District encompasses the City of Beacon, as well as portions of the Town of Fishkill and a small area of Wappinger. Therefore the \$12,644 overall tax levy per student is distributed among these three municipalities, proportionally reducing the fiscal impact on City of Beacon taxpayers.

While the overall total per student costs are useful metrics for certain tasks, such as overall district budgeting, it inadequately estimates the marginal cost of educating a new student in situations where no new facility construction is required. This is so because the average cost includes various fixed administrative and capital expenditures that would not be affected by the introduction of new students (such as administrative staff salaries, building maintenance and service costs and debt service).

⁸ Beacon City School District website.

Instructional costs provide a more accurate estimate of the incremental cost of educating additional students generated by new residential development, although it is still conservative as costs do not increase in a direct ratio.

Instructional costs include instructional related activities such as regular education and special education programs, guidance, extracurricular activities and transportation services, among others. As identified in the district budget, instructional costs for the 2015 – 2016 academic year account for \$49,015,785 or 73.9% of the total budget. Based on a student enrollment of 2,866, the instructional program costs per student is \$17,102, of which \$36,262,918⁹ was paid by the Local tax levy. This results in an instructional cost per student paid by the local tax levy of \$12,639 (Table 7).

TABLE 7				
2015-2016 ACADEMIC YEAR				
INSTRUCTIONAL COSTS AND TAX LEVY PER STUDENT				
Instructional Costs (A)	District Enrollment (B)	Program Cost Per Student (A ÷ B = C)	% of Instructional Costs Paid by Local Tax Levy (D)	Tax Levy Per Student (C x D)
\$49,015,785	2,866	\$17,102	73.9%	\$12,639

VI. SCHOOL DISTRICT FISCAL IMPACT OF THE EDGEWATER:

The Edgewater will generate new real estate taxes based on the following assessment rates:

- Dutchess County – 3.68%
- City of Beacon – 13.35%
- Library – 0.56%
- School District – 21.9%

It is projected that The Edgewater will generate approximately \$1,314,000 annually in real estate taxes for the Beacon School District, based on a project market value of \$60 million an equalization rate of 100.00 and a school district tax rate of 21.9 per \$1,000 of assessed valuation.

Table 8 presents the cost to the Beacon City School District to educate the school children generated by The Edgewater.

⁹ Beacon City School District website, School Budget

TABLE 8 FISCAL IMPACT SUMMARY		
	Overall Cost Per Student	Instructional Cost Per Student
	\$23,116	\$17,102
Number of Students	47	47
Total Cost for all New Students	\$1,086,452	\$803,794
School Tax Generated by Project	\$1,314,000	\$1,314,000
Net Surplus	\$227,548	\$510,206

If the project generated tax revenue were applied to the portion of the school paid by the local tax levy alone, the net overall and instructional surplus would be approximately \$720,000.

VII. SUMMARY AND CONCLUSIONS:

The Edgewater is a 307 unit residential development, that when fully occupied, will increase in population of the City by as many as 558 new residents. It is likely that the actual number of new residents will be less, as some tenants in the project will already reside in the City. A proportion of these new residents may include school aged-children.

The first major factor that limits the potential impact on the school district is the nature of the proposed development. Edgewater is a TOD project. Employing the very conservative Rutgers University, Center for Urban Policy Research multipliers, approximately 47 school-aged children would reside in the development. No other comparably sized, recently constructed projects exist in the City, which could be used to gauge the number of school-aged children that actually reside in these types of projects. However, numerous examples exist throughout the region demonstrating that the actual number of school-aged children residing in larger-scale multi-family developments, consisting of predominantly 1 and 2 bedroom units, in or near central business districts and transit hubs, is far fewer than the numbers estimated employing the Rutgers multiplier. As noted above, a TOD project such as Edgewater is expected to generate even fewer school age children than a traditional multi-family project, compounding the conservatism of the Rutgers multiplier. Nevertheless, for the purposes of producing a very conservative estimate, the 47 students projected utilizing the Rutgers multiplier is used for this analysis.

The second major factor limiting the potential impact on the school district is demographics. The current enrollment in the Beacon City School District is 735 students lower than the District's peak enrollment during the 2004 – 2005 academic year. It can therefore be concluded that the 47 new students can be easily physically accommodated within the existing schools. Moreover, these new students would not all be entering a similar grade, or attending a single school, but would rather be proportionally distributed among the various grades at the South Avenue Elementary School, Rombout Middle School and Beacon High School, thereby further diminishing their direct impact on existing school populations. It is also possible that some of these students may attend private or parochial schools, further reducing the impact on the Beacon City School District.

Demographic trends in the City, which are reflective of, and consistent with trends throughout the region and nationally, indicate that family sizes are decreasing, resulting in the generation of fewer school-age children. These trends demonstrate that for the foreseeable future, population pressures will not impact the District's capacity or capability to accommodate the relatively modest number of new students projected to result from the development of The Edgewater.

No significant adverse impacts to the Beacon City School District are anticipated as a result of the development of The Edgewater. The project will not generate a large number of students, and will generate approximately \$1,314,000 in real estate taxes annually for the Beacon City School District. Employing the current per student costs to educate a pupil, The Edgewater will generate a significant annual tax revenue surplus for the Beacon City School District.