

1. INTRODUCTION

At the request of the Massachusetts Housing Partnership (MHP) and Westford Land Use Management Department, RKG Associates, Inc. has reviewed municipal finance, public safety, and school enrollment data from the Town of Westford in order to estimate the impact of multifamily housing on community services. As we understand it, Westford is considering options for multifamily zoning in one or more areas along Route 110, and possibly other locations as well. However, there are concerns that multifamily developments could put costly burdens on the schools and town departments, notably police, fire, and emergency medical services. These concerns stem, at least in part, from Westford's experience with a new Princeton Properties development off Littleton Road. According to the Westford Public Schools, there are 75 K-12 students living at Princeton Westford: three times the number of students projected by the developer in 2011.¹

Although the original fiscal impact study clearly underestimated the development's school-age population, we do not think Princeton Westford can be relied upon as the primary basis for projecting the impact of multifamily housing on Westford's schools. For the reasons laid out in this report, we believe Princeton Westford is, at best, the high end of range that anyone should use in a rental housing fiscal impact analysis in Westford, at least in the near future. With this in view, we want to shed light on a broader set of conditions that a fiscal impact analysis should account for in order to forecast the cost and revenue effects of residential land use change. We hope the information is useful to the Town of Westford as the Planning Board and other town boards and committees continue to review multifamily zoning opportunities and process Chapter 40B applications.

2. WHAT HAPPENED?

A Tale of Two Housing Developments

Princeton Westford is a 200-unit, mixed-income apartment development off Littleton Road (Route 110), not far from the Chelmsford town line. Constructed under a Chapter 40B comprehensive permit issued by the Board of Appeals in 2011, the project offers 40 units for low-income households and 160 market-rate units.² Overall, 75 percent of the apartments are two-bedroom units, and since state policies require a proportional distribution of low-income and market-rate units by unit size, 30 of the low-income apartments have two bedrooms and 10, one bedroom. The site lies some 2,000 feet back from the main road, with an access drive (Princeton Way) crossing wetlands and a utilities easement. Princeton Westford has the amenities typically found in market-rate rental developments, notably a club house and pool. It also has a fenced-in playground with children's play equipment near the clubhouse, prominently located at the front of the site.

¹ Connery Associates for Princeton Properties, August 4, 2011. At the time, Mr. Connery estimated that Princeton's apartment development would house 24 students. The Town's peer review consultant, Larry Koff & Associates, largely agreed, suggesting a min-max range of 21 to 36 students.

² The 200-unit Princeton Westford project was built on land that had been slated for a 308-unit mixed-income development in 2006. The larger project never went forward due to the recession.



Princeton Westford (l) and Abbot Mill (r) in Westford, Massachusetts.

The monthly rents for market-rate units range from \$1,780 to \$2,535. Approximately 5 percent of the units are vacant and available for rent.³

Princeton Westford is not Westford’s only apartment development. For example, on the other side of town, where Pleasant Street crosses the Stony Brook, is the historic Abbot Mill site. Recently redeveloped as 131 mixed-income apartments, the “Phase I” Abbot Mill project also offers a mix of one- and two-bedroom units.⁴ The affordable housing options differ, however, because Abbot Mill was developed under Westford’s Mill Conversion Overlay District (MCO) bylaw, not Chapter 40B. Westford has an inclusionary housing policy that sets affordability targets for three income groups: low-income, moderate-income, and median-income households. Of the affordable units in an inclusionary development in Westford, about two-thirds will normally qualify for the Chapter 40B Subsidized Housing Inventory (SHI). The median-income units meet a need that is not addressed through ordinary operations of the market, but they are not SHI eligible. As a result, Abbot Mill Phase I has 20 affordable units (15 percent), with 13 rented to low- or moderate-income households.⁵ The school department reports that there are currently 14 students living in the Abbot Mill development.⁶ The monthly rents for market-rate units range from \$1,665 - \$2,800, though on a per-sq. ft. basis, the Abbot Mill rents are slightly lower than at Princeton Westford. The vacancy rate at Abbot Mill is reportedly 3.5 percent.⁷

The differences between Princeton Westford and Abbot Mill speak to the challenge a fiscal impact analyst confronts when projecting the impact of housing on public schools. Assuming that all of the school-age children live in the two-bedroom apartments (which is usually but not always true), the per-unit student multiplier for Princeton Westford would be 0.49 and for Abbot Mill, it is approximately 0.21. Using overall multipliers, as fiscal

³ RentPath LLC, at rent.com. Data current as of December 1, 2016.

⁴ Phase II, with an additional 102 units, is currently under construction.

⁵ The low- and moderate-income units at Abbot Mill have not been added to the SHI due to problems with the regulatory agreement.

⁶ Kathy Auth, Westford Public Schools, to RKG Associates, Inc., November 2, 2016.

⁷ Rent.com, December 1, 2016.

impact analysts often do, the average is actually 0.38 students at Princeton Westford (200/75) and for Abbot Mill Phase I, it is 0.11 (14/131). If the demographic assumptions used in the Princeton Westford fiscal impact study had been applied to Abbot Mill Phase I, the school student forecast would have been right. For Princeton Westford, the assumptions failed. Why is it that two new apartment developments in the same town, each with a mix of one- and two-bedroom units, have attracted such different households?

Inquiring Minds Want to Know

When a community does not have many developments like the one an analyst has been asked to evaluate, the best (and most defensible) way to estimate the impact of a proposed project requires case studies of comparable projects in comparable communities. The hard truth about fiscal impact analysis is that good case studies can be very difficult to find, especially when the subject town is an affluent, growing suburb like Westford and the proposed development is mixed-income housing with low-income apartments. In a situation like this, the analyst must start by taking a systematic approach to identifying comparable communities. Context, location, and demographics are significant determinants of a community’s future households, and location within the community can further sway the outcome.

Even when one can control for all of these factors, what the analyst never knows is how the applicant will eventually market the project. Marketing is key. It is not uncommon for the marketing and sales staff for Greater Boston apartment developers to court large companies that need relocation units, short-term stay facilities for traveling employees, and temporary housing for science and technology professionals from other countries who come to the region to work for two years. They tend to be highly educated, and they want the best schools for their children. More often than not, when we have found unusually high numbers of school students in apartments within the Boston metro labor shed, the developments are located in affluent towns with highly competitive schools *and* on sites with good access to the regional highway system or public transportation (or both). This may explain some of the differences between Princeton Westford and Abbot Mill.

The household incomes of tenants in mixed-income developments need to be considered, too. Every apartment developer we have ever asked has told us that yes, low-income renters tend to have more children than other renters, but income alone is not the only predictor of household size – and not always a very good one at that. Throughout the Commonwealth, most of the towns with a very high average number of school children per household are wealthy suburbs with few if any apartment developments:

The Top 15						
Average Number of School Children per Household	Medfield	0.95	Sudbury	0.86	Hopkinton	0.83
	Wellesley	0.94	Dunstable	0.85	North Attleborough	0.81
	Dover	0.90	Westwood	0.84	Winchester	0.81
	Douglas	0.89	Mansfield	0.84	Wenham	0.80
	WESTFORD	0.87	Weston	0.83	Franklin	0.80

Source: American Community Survey Five-Year Estimates, 2015.

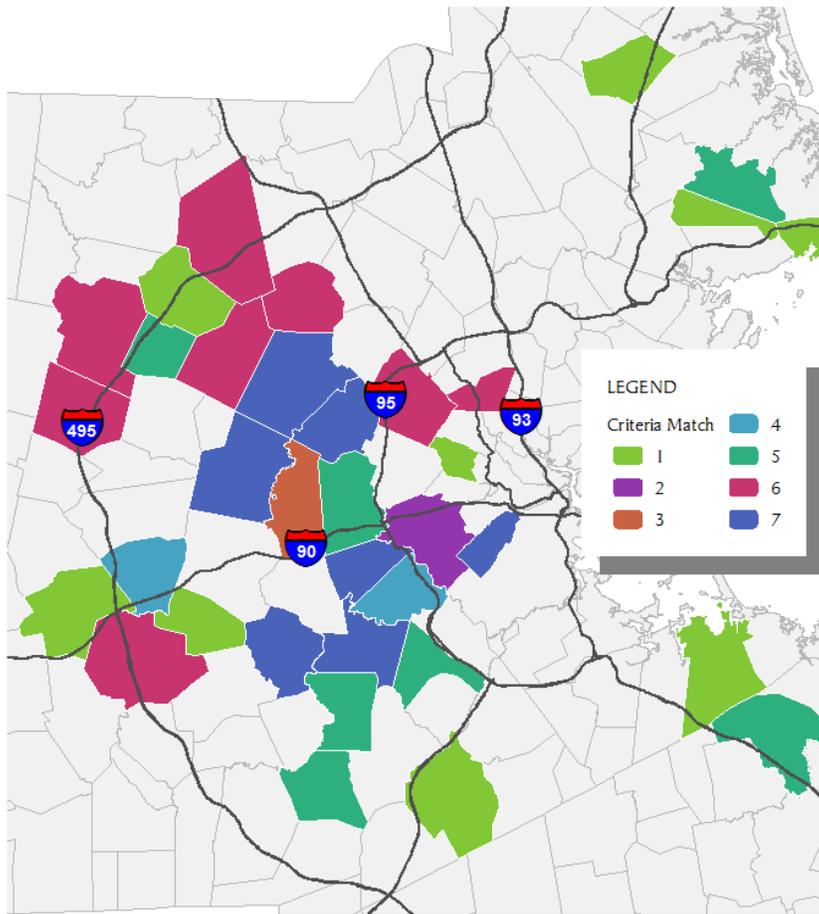
3. INDICATORS

In our experience, there are several community characteristics that tend to predict the attractiveness of new mixed-income apartments to families with children. Having developed these criteria over several years of fiscal impact analysis, we find them most helpful for identifying “peer group” communities for purposes of making demographic forecasts. It is critical to start with a comparable community assessment because developments in similar settings but very different towns will not provide a valid basis for making projections. While the indicators listed below do not substitute for site location or the marketing strategies the developer will use to fill the units, they do provide a good entry point for a fiscal impact analysis when viewed in their entirety. In addition, the data required to do this analysis are readily available, and practicality has to be a consideration.

- 1) Existing family size; state rank. Communities that have a high average number of school-age children per family have qualities that attract families (usually schools);
- 2) Families as a percentage of all households, state rank;
- 3) Educational attainment; state rank. Communities with a well-educated population are often communities where parents have both high expectations *and* high incomes, and those expectations have an impact on what the public schools can offer;
- 4) Median family income, state rank;
- 5) Percentage of high school students with high Advanced Placement test scores, state rank;
- 6) Math SAT score, state rank;
- 7) Ratio of local per capita income to state average per capita income, and
- 8) Geographic proximity (for this purpose, one could use the labor shed or, for a quick assessment, roadways and river corridors).

The following map highlights the Greater Boston area communities with the highest ranks for the criteria listed above. Some communities have a high ranking for one criterion and others have a high ranking for all seven criteria. There is clearly a strong affinity between Westford and a cluster of Route 2-oriented suburbs: Acton, Concord, Carlisle, Harvard, Bolton, and Lexington, along with Winchester and Hopkinton.⁸

⁸ For the towns with only one criterion match, the criterion is either high rank for Math SAT scores or high rank for percentage of AP test takers with high test scores. There are other communities not shown on the map that rank high for one or more of the other criteria, but not student performance.



Brookline	7	Needham	4
Concord	7	Southborough	4
Dover	7	Wayland	3
Lincoln	7	Newton	2
Sherborn	7	Ashland	1
Sudbury	7	Belmont	1
Wellesley	7	Georgetown	1
Acton	6	Hingham	1
Bolton	6	Littleton	1
Carlisle	6	Manchester	1
Harvard	6	Sharon	1
Hopkinton	6	Wenham	1
Lexington	6	Westborough	1
WESTFORD	6		
Winchester	6		
Boxborough	5		
Hamilton	5		
Medfield	5		
Norfolk	5		
Norwell	5		
Weston	5		
Westwood	5		

Sometimes communities with similar “indicator” ranks do not have much if any rental housing, and even when they do, the projects can be very different. Of the towns most closely matched with Westford, only two have sizeable apartment developments without age restrictions: Hopkinton and Acton.

- Woodview Legacy Farms in Hopkinton is a 240-unit, moderately dense development south of Route 135 about a mile east of Hopkinton Center. It is part of the much larger Legacy Farms mixed-use development that will have, at buildout, over 900 housing units, mainly homeownership units. The average number of students per unit at Woodview Legacy Farms (based on October 2015 enrollments) is 0.22: roughly in the middle between Abbot Mill and Princeton Westford.⁹
- In Acton, however, the 296 units at Avalon Acton/Woodlands at Laurel Hill currently house 108 public school students, including children enrolled in the Acton-Boxborough Regional School District and Minuteman Technical High School.¹⁰ The average per

⁹ Elaine Lazarus, Land Use Director, Town of Hopkinton, October 2016. Though it was not built under a Chapter 40B comprehensive permit, Woodview Legacy Farms includes 25 percent affordable units.

¹⁰ Roland Bartl and Kristen Guichard, “Fiscal Analysis, Kelly’s Corner Improvement Initiative” (January 28, 2016), 3.

unit, 0.36, is very close to Westford’s experience with Princeton Westford. Avalon Acton is also very similar to Princeton Westford in that 20 percent of the units are affordable to low-income households (as opposed to 25 percent for moderate-income households).



There are several possibilities to account for differences between these two developments, including physical location, neighborhood context, and affordability targets. It has also been speculated that Woodview may be attracting some families who have a house under agreement either at Legacy Farms or elsewhere in town and moved into an apartment before September in order to have their children start the school year in Hopkinton. However, there is not enough experience with Woodview to measure such trends.

What about Lexington?

Among Boston-area mixed-income apartment developments, Avalon at Lexington and Avalon at Lexington Hills have the highest average number of school students per unit that we have found in any suburb. The numbers are very high: 0.42 at Avalon at Lexington Hills and 0.69 per unit at Avalon at Lexington, which is the older of the two developments. In consultations with AvalonBay developers, they assert that the “128 factor” explains the large school-age population in their Lexington properties, and to some extent they may be right. Still, according to data from the Newton Public Schools – another prestigious school district inside Route 128/I-95 – the average number of public school students in the city’s larger apartment developments ranges from a low of 0.29 (Arborpoint at Woodland Station) to a high of 0.42 (Woodland Park). The student generation rates at AvalonBay’s two developments in Newton are similar to Princeton Westford, i.e., an average of 0.33 (Newton Highlands) to 0.35 (Chestnut Hill).¹¹ These are still high numbers for the Greater Boston area.

Many people hearing of AvalonBay’s K-12 enrollment history in Lexington think the same outcomes will occur in their own communities, but it is rarely the case. Like Princeton Westford, Avalon at Lexington has units affordable to low-income people (at Avalon at Lexington Hills, the affordable units are 25 percent of the total and they are priced for moderate-income households). Still, the market-rate rents in Lexington are higher, so even

¹¹ Newton Public Schools, *Enrollment Analysis Report: 2014-2015 to 2019-2020* (November 2014), 4.

though it has some deeply affordable units, it also has market-rate tenants paying very high rents for the prestige of living in Lexington. Princeton Westford differs from both of AvalonBay's Lexington developments in at least one other way: the Lexington developments have three-bedroom units, especially Avalon at Lexington, the older of the two projects. For a variety of reasons, the AvalonBay developments in Lexington are not ideal comparables for Westford even though the two towns share some population and household characteristics. To some extent, the difference may be location, but we also believe marketing has a great deal to do with the demographics in Lexington's apartments. Lexington also has the top-rated high school in Massachusetts.

If we were trying to estimate future enrollments for mixed-income apartments in Westford, at least in locations with highway access nearby, we would most likely use examples like Woodview in Hopkinton and Avalon Acton to set a minimum-maximum projection. There are other apartment developments in the region to consider as well, such as Concord Mews, but according to the most recent data we have from the town, the average number of students at Concord Mews has not been particularly high: 0.18 – 0.21 students per unit, even in a development with three-bedroom units. In other multifamily units in Concord, however, the number of children runs high relative to Boston metro regional averages, based on sample data from the town – anywhere from 0.24 to 0.33 school-age children per unit.¹² These numbers are more like what has been reported in Hopkinton and Acton.

Reasonable High-Low Range Students/Unit in Westford: 0.22 to 0.36

These estimates would have to be adjusted for a proposed development with a large percentage of affordable units, but for a typical mixed-income apartment development with 20-25 percent affordable units, we think the above range is appropriate even though the high end of the range would produce a lower estimate (72 students) than the number of children currently residing at Princeton Westford (75 students).

4. ESTIMATING SERVICE COSTS

Public Schools

It is deceptively simple to forecast public school costs by multiplying the estimated number of students in a new development by the community's average expenditure per pupil, but the result does not measure the net cost of enrollment growth. Much like using a town's current average cost per person for public works, public safety, or general government to forecast what new housing units will cost for additional non-school services, the per-student cost multiplier will almost always overstate the marginal cost of adding new students. An alternative for forecasting the budget impact of an increase in public school students requires extracting from the school budget the line items that reflect direct service

¹² Marcia Rasmussen to Eric Halvorsen, RKG Associates (2016). The data we received from Concord was based on counts from November 2014 except for Concord Mews, which is based on counts from November 2013. We did not have more current information for this report.

and using the result to create a net cost multiplier. For example, adding 20 students to an elementary school does not require hiring a new building principal or curriculum specialist, but depending on their grade levels and available classroom space, adding 20 students could require hiring a new teacher and buying additional classroom supplies. The most accurate method is a true marginal cost study, but if done properly, it can be time-intensive and costly. Nevertheless, it is very similar to what the school department does every time Dr. Olsen has to defend a requested budget increase for additional staff, equipment, or technology. The issue is, to what extent will a change in conditions result in a change in operating expenditures?

Westborough comes to a mind that a town that has, at least in the past, tracked and reported average number of children per housing unit by housing type so that developers who had to submit a community impact study did not have to spend hours trying to find data, only to be told that the assumptions they used were not valid.

To help everyone with an interest in this subject, it would be ideal if the school department provided a net cost multiplier for use by anyone who has to provide or review a fiscal impact study: developers, other outside organizations, town staff, or consultants working for the town.

Some communities publish the assumptions developers must use to prepare a fiscal impact analysis, such as trends in net cost per household for various municipal services, net cost per student (sometimes reported as a sliding scale, where the net cost changes depending on the estimated number of new students), and simple revenue projections such as the average excise tax bill per household. All of this information can be gleaned from municipal finance records, but many disagreements could be avoided if communities simply made the information easily available to anyone who needs it. Westborough comes to a mind that a town that has, at least in the past, tracked and reported average number of children per housing unit by housing type so that developers who had to submit a community impact study did not have to spend hours trying to find data, only to be told that the assumptions they used were not valid. Alexandria, Virginia publishes a detailed breakdown of average school students by housing type based on a three-year rolling average from a large sample of housing units.

In Westford, it appears that approximately 18 percent of the school budget is devoted to fixed costs that are not determined by enrollment swings, e.g., the School Committee, the Superintendent's Office, the administrative cost of individual schools, custodial services, buildings and grounds maintenance, and so on. Using 82 percent of the school budget as a guide for the variable cost of education per child, a reasonable General Fund net cost multiplier is approximately \$8,800 (rounded) in FY 2017 dollars.¹³ A close but somewhat higher cost per student can be derived from the Department of Elementary and Secondary Education's (DESE) Chapter 70 Profile series, which indicates that Westford's Actual Net

¹³ Using a similar approach, Princeton Properties and the Board of Appeals' peer review consultant estimated the cost of educational services for Princeton Westford at \$170,400 (24 students) to a high of \$203,000 (36 students).

School Spending from local sources (net of Chapter 70 aid) is about \$9,100.¹⁴ The average cost multiplier from these two sources is so close that either number can be used (the difference for 75 students is only \$22,500). For any given housing development, these estimates could be higher or lower depending on location, e.g., whether the town is required to provide transportation. They also could be higher or lower depending on the grade levels of the children. Undeniably, the school department provides other services that are offset with non-General Fund revenues, too, but fiscal impact is mainly about sources and uses of *tax revenue*.

Reasonable Education Cost Estimates: \$8,800 - \$9,100 per student in the Westford Public Schools, and \$11,750 per student at NVTSD. (FY17 dollars)

The town's cost for students to attend Nashoba Valley Technical School District (NVTSD) is much higher than the average K-12 per pupil cost, as is the case with any vocational-technical school. The number of Westford students attending Nashoba Valley Tech at any given time is equal to about 1 percent of the total K-12 enrollment. It would be appropriate to assume that for any sizeable apartment development, there will be the greater of one NVTSD student or 1 percent of the total projected K-12 population. Westford is assessed based on its contribution to the school's enrollment. In FY 2017, the town's assessment is approximately \$11,750 (rounded) per student.

Caveats. We need to point out that even the approximate net cost numbers here do not really get at the nuances of how housing growth can affect a school district. A very good example is that even though Westford's enrollments have dropped slightly over the past few years, the budget has continued to increase and some of the components of that increase relate to demographic changes in the community. In FY 2018, the school department is requesting funds for an English Language Learner instructor due to growth in the number of students with limited or no ability to speak English. Preschool enrollments are growing, too, necessitating a stronger commitment to early childhood special education services.¹⁵ These conditions suggest to us that while Westford may expect an increase of anywhere from 650 to 800 new housing units over the next few years, the questions to be asked about public school impacts are not limited to how many teachers, desks, and textbooks. It is also important to understand what Westford's new residents will need and expect, and how the Town can best accommodate both these new needs and the changing needs brought about by housing turnover. Housing growth alone will not drive changes in the demands placed on Westford's public schools. This is already true throughout the Greater Boston region. A noteworthy example is the Town of Shrewsbury, where Asian Indian families comprised over half of all single-family homebuyers in 2013.

¹⁴ Massachusetts Department of Elementary and Secondary Education (DESE), Chapter 70 Profile Series: Westford Public Schools, Actual Net School Spending (Actual NSS).

¹⁵ Westford Public Schools, *Superintendent's Fiscal 2018 Budget Request* (November 10, 2016), 7, 15, 18.

Town Services

RKG met with staff in the Fire Department and communicated by email and telephone with staff in the Police Department. (Our scope of work did not include other municipal operations.) We wanted to understand the demands placed on Westford’s public safety personnel by multifamily developments on one hand and other types of housing on the other hand. For purposes of this study, we asked public safety staff to identify a few areas of town that are exclusively or predominantly composed of single-family detached dwellings and export from their databases the number of calls for those neighborhoods. This would allow us to compare the demand generated by Westford’s primary housing type (single family homes) with multifamily developments and age-restricted residences. The tables below summarize the data we received from each department in November-December, 2016. Except where noted, the number of incidents represents almost five years of activity.

Fire Department. The Westford Fire Department has 31 FTE employees, including 30 uniformed personnel, operating out of three fire stations. It is a 24/7 operation that responds to fire suppression, emergency medical, and other calls, e.g., commercial box alarms, and also conducts a variety of commercial and multifamily residential inspections as required by law. The Fire Department’s operating budget is approximately \$3.1 million (FY 2017). In a given year, the Fire Department response to about 3,000 calls, including fire, medical, and other.

Calls for Assistance: Westford Fire Department, 2012-2016						
	Units	Fire Department Calls			5-Year Average/Unit	
		Total	Fire	Medical	Total	Medical
Multifamily Developments						
Brookside Mill (Condo)	75	18	9	9	0.24	0.12
Westford Housing Authority (Elderly)	48	88	0	88	1.83	1.83
Village at Mystery Spring (Elderly)	37	114	3	111	3.08	3.00
Princeton Properties*	200	29	17	12	0.15	0.06
Abbot Mill	131	23	5	18	0.18	0.14
Avalon Bay	<u>28</u>	<u>27</u>	<u>9</u>	<u>18</u>	0.96	0.64
Totals	519	299	43	256	0.58	0.49
Single-Family Neighborhoods & Small-Scale Condominiums						
Stone Ridge 55+ Development	105	104	14	90	0.99	0.86
Forge Village Magnolia Drive	234	60	14	46	0.26	0.20
Nabnassett Lake Side Terrace	<u>108</u>	<u>49</u>	<u>27</u>	<u>22</u>	0.45	0.20
Totals	447	213	55	158	0.48	0.35

Source: Westford Fire Department, November 2016.
*Princeton Properties calls are for the period 1/1/13 to 11/3/16, and the annual calculation is based on four years, not five. All others are 1/1/12 to 11/3/16.

It would be hard to validate an assumption about future calls from multifamily housing based solely on the data reported above. A check with fire departments in other towns

(Hopkinton and Acton, at least) would be appropriate. However, some trends can be seen in Westford’s data that are similar to conditions we have seen in other communities. On a per-unit basis, the greatest residential demand on fire departments is not multifamily dwellings; rather, it is age-restricted housing, especially residences serving older seniors and frail elders. When the data are annualized and the annual average is divided by the number of units in each type of housing, the age-restricted units in Westford generate about five times more calls per unit (mainly emergency medical) than single-family detached dwellings and over six times more calls than apartments. Many people understand this intuitively even if they do not have the actual statistics in hand, yet most towns have not imposed the same barriers to elderly housing that have led to the current region-wide shortage of affordable housing for families, singles, and other types of households.

Police Department. The Westford Police Department has 48 FTE employees, including 44 uniformed personnel. Its operating budget is approximately \$5.2 million.

Calls for Assistance: Westford Police Department, 2012-2016			
	Units	Police Department Calls	5-Year Average Per Unit
Multifamily Developments			
Brookside Mill (Condo)	75	105	1.40
Westford Housing Authority (Elderly)	48	198	4.13
Village at Mystery Spring (Elderly)	37	301	8.14
Princeton Properties*	200	439	2.20
Abbot Mill	131	344	2.63
Avalon Bay	<u>28</u>	<u>169</u>	6.04
Totals	519	1,556	3.00
Single-Family Neighborhoods & Small-Scale Condominiums			
Stone Ridge 55 + Development	105	132	1.26
Forge Village Magnolia Drive	234	92	0.39
Nabnassett Lake Side Terrace	<u>108</u>	<u>111</u>	1.03
Totals	447	335	0.75

Source: Westford Police Department, December 2016.
*Princeton Properties calls are for the period 1/1/13 to 11/3/16, and the annual calculation is based on four years, not five. All others are 1/1/12 to 11/3/16.

Since the Police Department is always the first responder on medical calls and provides assistance to the Fire Department as needed, the high five-year average number of calls per unit for senior housing makes sense. However, the Police Department’s experience with multifamily housing is different from that of the Fire Department. Converted to an average annual number of calls per unit, the calls generated by Princeton Westford, Abbot Mill, and the AvalonBay units on Bay Drive run anywhere from a one call per two units per year to over one call per unit per year. The overall average number of calls per unit for the multifamily projects in the sample we studied is over four times the number for single-family homes. The average time on the scene per incident is longer as well. For example, the average time on the scene for police response at Village at Mystery Spring (senior

housing) ranged from 10 minutes to 14 minutes per call, but at the AvalonBay units on Bay Drive, the average time on the scene per call ranged from 15 minutes to over a half-hour. In the single-family neighborhoods, the average response time per call has ranged from eight to 19 minutes, but there are fewer calls as well. Thus, while a modest increase in demand on the Fire Department may occur with more multifamily development in Westford, a more noticeable increase in demands will be felt in the Police Department. It is very important to note, however, that demands on the Westford Police Department are also growing because of increased activity in the commercial areas along Route 110.¹⁶

Reasonable Public Safety Service Cost Estimates				
	Cost Factor	Police Cost Per Household	Cost Factor	Fire Cost Per Household
Single-Family Dwellings	1.00	\$648	1.00	\$393
Multifamily Units	1.45	\$940	0.75	\$295
Age-Restricted Housing	1.56	\$1,011	1.55	\$610

Source: RKG Associates, Inc.
Note: Single-family dwellings represent the base average cost per household simply because they are the most common housing type in Westford. In an urban setting, the base cost would most likely be tied to a different residential land use.
For methodology used to compute the base average cost per household, see Attachment A.

Caveats. The service demands from multifamily housing in Westford need more study than we can accommodate within our scope. Ideally, the town should have a sample of addresses and neighborhoods to track consistently, over time, in order to have a better picture of demands from various housing types. In our experience, a high volume of public safety calls is often associated with property management problems: lack of an on-site resident manager, non-performing on-call security, inadequate tenant screening and tenant selection policies, and so on, yet the public perception is that the tenants as a group are to blame. In any review of a proposed multifamily rental development, whether permitted under Chapter 40B or local zoning, the approval authority should always evaluate not only the applicant’s apartment development experience, but also the developer’s plans for property management and the experience of the designated property manager.

5. ESTIMATING REVENUES

Projecting own-source revenues from new development is usually the least controversial aspect of most fiscal impact studies. The following are the recurring General Fund revenue sources that should be accounted for in a residential land use study.

- Real estate taxes
- Motor vehicle excise taxes
- State aid (primarily Chapter 70)

¹⁶ Town of Westford Fiscal Year 2017 Budget, Police Department, 70-71.

Except for state aid, arriving at a verifiable estimate of real estate and motor vehicle excise taxes is not difficult to do.

There are also one-time, non-recurring revenues that should be included as well, mainly building permit fees. Though the revenue occurs only once, it can play an important role in the fiscal impact of a project at the earliest stages – e.g., when construction is underway and initial occupancies occur, but the full benefit of the increase in assessed value has not yet been tapped.

Real Estate Taxes. Developers are sometimes overly optimistic about real estate tax revenue, not because they want to deceive people but simply because there are many unknowns during the permitting process. If the rent-up period is slow and the developer decides to reduce asking rents in order to lure new tenants, the project's income stream will be reduced accordingly and so will the assessed value. Local approval authorities almost always want some confirmation from the local assessor about what the likely valuation will be for a proposed development. Now that Westford has a track record with a few fairly large apartment developments, it may not be difficult for the assessor to provide the Planning Board or Board of Appeals with an estimate of taxable value, usually reported in terms of an average assessed value per unit. The impact of reducing an affordable housing development's required percentage of low- or moderate-income units can be seen in the assessed value differences between Princeton Westford and the Abbot Mill property.

- Princeton Westford, situated on over 80 acres of land and having a variety of indoor and outdoor recreation amenities for residents, is assessed for \$21,496,700, or an average of \$107,480 (rounded) per unit. At Westford's current tax rate, Princeton Westford pays approximately \$352,760 (rounded) in real estate taxes per year, or \$1,764 per unit.
- By contrast, the Abbot Mill, on just 12 acres, is assessed for \$17,234,700, or \$131,560 (rounded) per unit. Abbot Mill's current year tax bill is \$282,820 (rounded), or \$2,159 per unit.

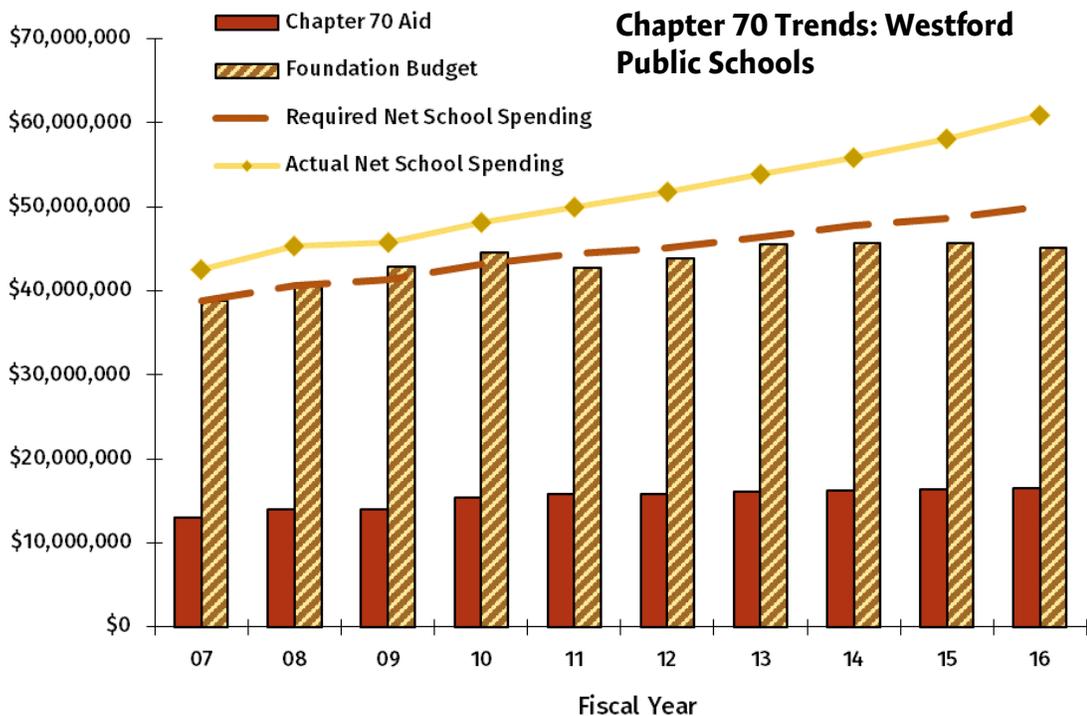
Princeton Westford provides 20 percent of its units as affordable housing for low-income families; the Abbot Mill, 15 percent for a mix of moderate- and middle-income tenants. The difference in local revenue is the cost of the greater public benefit in affordable housing offered by Princeton Westford.

Excise Taxes. It should not be difficult to estimate the average motor vehicle excise tax payment per new multifamily unit in Westford because at this point, the Town has experience with vehicle ownership by renter households. The average FY 2017 excise tax bill per household in Westford is approximately \$430, using the Town Manager's projection of excise tax revenue when this year's budget was prepared. (We do not know if \$3,397,050 is an underestimate, but it is almost certainly a conservative estimate.)¹⁷ If

¹⁷ Fiscal Year 2017 Revenue Overview (February 11, 2016), 3.

Westford had no apartment developments and an analyst had to make an educated guess, the average of \$430 would suffice, but it probably overstates excise tax revenue from rental housing because renters tend to have fewer vehicles per household. Using \$430 on average as a guide, Princeton Westford generates about \$86,200 in motor vehicle excise taxes. This would have to be confirmed with the tax collector, yet again, Westford could go a long way toward making fiscal impact studies a good tool for future planning if data such as excise taxes for different types of housing were published from year to year.

State Aid. Except for very large, multi-phase developments that have the potential to change a community’s rank for equalized valuation (EQV) per capita or population growth rate, most residential fiscal impact studies in Massachusetts do not include a forecast of growth or change in state aid. The largest single source of aid in most towns, including Westford, is Chapter 70 school aid, which is not allocated on a per-pupil basis. Analysts typically look at a school district’s recent experience with Chapter 70 aid, and if there is a fairly consistent pattern, i.e., Chapter 70 as a percentage of Actual NSS remains constant over time, most would agree to assume the same level of support at least in the near term. In Westford, this has not really been the case. Chapter 70 aid today represents about 27 percent of Actual NSS per student, but 10 years ago, it made up 30.6 percent of Actual NSS per student. As a result, while Chapter 70 aid in Westford has increased, it has not kept pace with the rate of growth in local spending on schools. This will be an important consideration in fiscal impact studies of new housing growth in Westford, not only due to growth in multifamily units.



6. OBSERVATIONS

Westford has anticipated a gradual decline in K-12 enrollments for several years now, yet the potential for as many as 800 new housing units could have a significant impact on assumptions about school facility space and the allocation of operating budget resources. Solutions such as redistricting elementary schools or realigning the grade configurations of the elementary and middle schools may have to be considered; fortunately, Westford has some capacity (building space) to consider these options. While new housing growth will draw attention to K-12 challenges and opportunities, it is critical for the Town to recognize that municipal services will also be affected and should not be overlooked. The natural tendency in almost every city and town we have worked in is to dedicate new revenue to the schools even as demands on public safety escalate. With this in mind, we think it is important to clarify what a fiscal impact analysis actually is and how it should be used.

- Fiscal impact measures the net revenue gain or deficit directly associated with a given land use. The relationship between costs and revenue is expressed in a ratio. When the ratio <1.00 , the total cost to serve a project is less than the total amount of revenue it will generate.
- A fiscal impact analysis looks at *direct* cost and revenue impacts. It does not capture other (non-fiscal) types of development impacts or indirect or secondary impacts, including those which may involve a change in municipal costs and revenues.
- A fiscal impact analysis of a large, multi-phase development involves a higher risk of inaccuracy than smaller or better defined developments. Despite an analyst's best efforts, sometimes conditions change in ways that could not be foreseen when a project was originally reviewed.
- In most cases, fiscal impact studies report future costs and revenues in today's (current) dollars. All dollars in this report reflect our analysis of FY 2017 budgeted revenues unless otherwise noted.
- For the following reasons, a fiscal impact analysis should never be the sole basis for making a major public policy decision:
 - Some types of development provide social or planning and community benefits that matter more than municipal revenues to a community's residents. For example, the provision of affordable family housing meets an important local need in accordance with the Town's Housing Production Plan, yet it may provide very little fiscal "benefit" and may actually need more local services than it can pay for on its own.
 - Fiscal impact studies provide an estimate of *net revenue* based on a series of assumptions. If the assumptions change, the net revenue may change as well.
 - The conclusions of a fiscal impact analysis do not guarantee that a town will actually commit new revenues to the services that experience new demand. *We*

think this is critical. A fiscal impact analyst's job is to identify and quantify a project's net operating impact on municipal and school services, but clearly consultants cannot control decisions made by the town's voters. Town meeting will make appropriation choices based on local priorities, not on estimates and projections reported by fiscal impact analysts.

- Operating costs increase even without population and household growth. A good example is the rapid acceleration in shared or "fixed" costs such as employee health insurance, which has occurred in all communities even those with population and employment decline. Similarly, in Westford and many, many towns throughout Eastern Massachusetts, K-12 enrollments began to drop over the past several years, yet school spending has continued to increase. Thus, while new housing growth will clearly accelerate the rate of spending growth, it is not the only factor that drives budget decisions.
- Westford may find it necessary to revisit its School Choice policies. The Town currently accepts School Choice students and, like other desirable school districts, Westford uses School Choice revenue to help support the cost of educating local children. A change in school enrollment trends and new demands on school facility space could require Westford to reduce its participation in the School Choice program.

Attachment A
Methodology for Estimating Nonresidential and Residential Service Costs

The following procedure, known as proportional valuation, is an industry standard that analysts use primarily to estimate the cost of services for nonresidential land uses. Iterations of it have been used for many years to understand the cost and revenue relationships of businesses, industry, institutional uses, and open space. It assumes that with some adjustments, a proportional relationship exists between the assessed value of a land use and its associated community service costs. By isolating nonresidential service costs from total municipal expenditures, the analyst can establish a more accurate picture of the cost of services used by residential development. Below is a step-by-step assessment of what Westford currently spends to provide municipal services to businesses and other nonresidential land uses in the community today. The table on the next page extends this analysis by allocating the Town’s operating budget by service category to residential and nonresidential land uses.

Proportional Valuation: FY 2017 Expenditures and Revenue (Part I)		
<u>Identifier</u>	<u>Methodology Component</u>	<u>FY 2017</u>
A	Total General Fund Expenditures	\$100,731,400
B	School Budget	\$55,923,700
F*	Net Cost of Municipal Services (A-B)	\$44,807,700
G	Non-Residential Real Property Value	\$547,829,000
H	Total Real Property Assessed Value	\$4,318,287,200
I	Ratio (G/H)	0.1269
J	Non-Residential Parcels	383
K	Total Parcels	8,874
L	Average Value: Non-Residential Parcel (G/J)	\$1,430,400
M	Average Value: All Parcels (H/K)	\$486,600
N	Ratio (L/M)	2.940
O	Refinement Coefficient**	1.35
P	Cost of Nonresidential Services (F*I*O)	\$7,674,000
Q	Residential Expenditures (F-P)	\$37,133,700
R	Nonresidential Percent (P/F)	17.13%

*Spreadsheet rows C-E are not part of this analysis.

**The refinement coefficient is used to adjust the proportion of the budget that will be assigned to nonresidential development in order to avoid overstating or understating the costs associated with commercial and industrial uses.

Note: “nonresidential real property value intentionally omits personal property.

Sources: Massachusetts Department of Revenue, Town of Westford FY 2017 Budget, and RKG Associates, Inc., based on model developed and refined by Robert W. Burchell, Center for Urban Policy Research, Rutgers University.

Proportional Valuation: FY 2017 Expenditures and Revenue (Part II)

General Fund Services (Excluding Schools)	Total Appropriation	% Nonresidential Total (from Part 1) Allocable to Service Category	Nonresidential Cost	Net Residential Cost	Average Cost per Household (Rounded)
General Government	\$4,518,900	6.0%	\$460,400	\$4,058,500	\$500.00
Public Safety	\$9,571,100	45.0%	\$3,453,300	\$6,117,800	\$800.00
Public Works	\$4,893,000	30.0%	\$2,302,200	\$2,590,800	\$300.00
Health & Human Services	\$1,107,900	3.0%	\$230,200	\$877,700	\$100.00
Culture & Recreation	\$2,037,400	5.0%	\$383,700	\$1,653,700	\$200.00
Debt Service	\$6,729,000	7.0%	\$537,200	\$6,191,800	\$800.00
Unclassified	<u>\$15,950,500</u>	<u>4.0%</u>	<u>\$307,000</u>	<u>\$15,643,500</u>	<u>\$2,000.00</u>
Total	\$44,807,800	100%	\$7,674,000	\$37,133,800	\$4,700.00

Source: Massachusetts Department of Revenue, Town of Westford FY 2017 Budget, and RKG Associates, Inc.
Numbers may not total due to rounding.