PREPARED FOR

THE TOWN OF BARNSTABLE

PREPARED BY

FXM ASSOCIATES

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Executive Summary

FXM Associates has been retained by the Town of Barnstable to prepare an independent assessment of possible economic effects from a reduction in permits issued for new single family home construction in Barnstable. Specifically, FXM Associates was charged with assessing the effects of a building cap on construction and related industry employment, household earnings, and local spending within the town. The report does not address the overall economic and fiscal implications of growth management in Barnstable, which would require a broader assessment of the town's current infrastructure and service capacity, as well as the congestion, open space, education, employment opportunities, and other quality of life variables that affect the town's ability to retain and attract residents, businesses, and net fiscal revenues.

The reader is strongly urged to consult the full report for a detailed discussion of the assumptions, methodology, and data sources used, as well as the full observations and findings of this analysis.

- *Residential construction, including remodels and additions as well as new single family homes, accounts for approximately $22 million in resident household earnings annually in Barnstable. An estimated $12 million of these resident earnings are annually spent for retail goods and services within Barnstable, representing about 1.1% of retail sales townwide. Approximately 700 person-years of employment annually are provided to Barnstable residents engaged in residential construction and related supplier industries, accounting for about 2.5% of the average annual employment townwide.*

- *A building cap on new single family homes, which scales from 132 market and 36 affordable units in 2002, to 96 market and 36 affordable in 2005 and thereafter, would reduce local spending and employment in Barnstable, assuming market conditions remain similar to those of the past several years. The economic effect locally depends upon the extent to which local contractors replace work lost within town with out of town work for Barnstable residents. About half of the contractors interviewed felt that they could find replacement construction work elsewhere on Cape Cod, at least in the short run. While there are expected to be some increases*

in remodelings, additions, and rebuilds in Barnstable as a consequence of reduced opportunities for new single family home construction, the substantial differences in value per permit between new construction and other work, actual experiences in other communities with building caps, as well as the judgments of local contractors, indicate reconstructions would have a minor effect in the short term.

- *Over the next four years, assuming no replacement of Barnstable work with out of town jobs for Barnstable residents, local spending on average would be reduced by approximately $3 million per year compared to conditions without the cap, a 0.3% impact on townwide retail sales. Person-years of employment would be reduced by about 170 annually, a 0.5% impact on average annual employment townwide. In 2005 and beyond, local spending would be reduced by about $4 million per year, a 0.4% impact on townwide retail sales at current annual levels. Person-years of employment for Barnstable residents in 2005 and beyond would be reduced by about 220, a 0.7% effect on townwide employment, assuming no new residential construction work were found in other communities to offset the loss under Barnstable's building cap. In a replacement work scenario, considered reasonable based on the interviews with local contractors, in which half of the contractors' current work in Barnstable were to be replaced by work out of town, and another twenty percent of construction workers now engaged in single family home construction find other jobs in local building trades, local spending would be reduced by $2.4 million per year by 2005 and beyond, and local employment opportunities would be reduced by about 70 person-years annually.*

Economic Effects on Construction and Related Industries of a Building Cap in Barnstable, Massachusetts

Introduction

FXM Associates has been retained by the Town of Barnstable to prepare an independent assessment of possible economic effects from a reduction in permits issued for new single family home construction in Barnstable. Specifically, FXM has been charged with assessing the effects of a building cap on construction and related industry employment, household earnings, and local spending within the town. A detailed discussion of the methodology used, assumptions, and limitations of the analysis follows this Introduction. A summary of the findings of FXM's research and analysis is included as the last section of the report.

It is important to note that this report does not address the overall economic and fiscal implications of growth management in Barnstable. According to town officials, the building cap is one component of a larger growth management strategy. The building cap is primarily intended to slow the rate of new additions to the housing supply while the full implications of growth on town services, infrastructure, taxes, and quality of life can be fully assessed, and long-term strategies developed to address community goals and objectives. One key issue with potentially significant economic and fiscal implications for Barnstable *not* addressed in this report, is the effect of new additions to the housing supply on the town's current and projected costs for water, sewer, roadway, police, fire, school, library, recreational, and other capital facilities, and the ongoing costs of servicing existing and possible new infrastructure and programs. While average tax

revenues and municipal costs per dwelling and school-age child may be a useful benchmark, a detailed assessment of capacity constraints (marginal costs) is also necessary to evaluate the implications of new growth. Capacity constraints have both physical facility and program cost implications. Since they are not addressed as part of the scope of FXM's work, and would require substantially more effort from town officials and the public, as well as the consultant, to properly assess, it would be misleading to show fiscal effects of new development based on average current costs. It would also be misleading to represent this report as the full context for possible economic effects, since tax rates, municipal services, congestion, and other variables now related to growth management will affect the ability of the town to retain and expand its commercial tax base and employment opportunities.

This report does estimate the possible direct, indirect, and induced effects on the economy of Barnstable of a short-term and possible long-term reduction in the value of new residential construction annually. Direct employment within the building trades accounts for approximately 5% of the total jobs in Barnstable. Not all of these jobs are held by town residents, and not all the earnings of construction workers employed by companies in Barnstable are based on new single family home construction within the town of Barnstable. As will be shown subsequently, FXM Associates' estimates that town resident employment attributable to new single family home construction in Barnstable accounts for approximately 2% to 2.5% of all jobs in Barnstable, and that the spending of these workers accounts for approximately 1% to 1.5% of retail sales townwide. This is the overall economic context within which the economic effects of a building cap would be felt.

ASSUMPTIONS AND METHODOLOGY

This study assesses the direct effect a cap on new single family home construction in Barnstable would have on Barnstable builders, the indirect effect on building and supply companies, and the induced effect by workers on local spending and jobs. FXM Associates estimated the effect a cap might have on the level of remodels and additions in construction, and its possible effect on the level of affordable housing. This study also compared current rates of construction and capped levels to assess what the impact of a sustained cap would have on total buildout in terms of time and the present value of money. Fiscal effects were estimated on a general level, in terms of tax revenue and school costs for current and capped conditions. Any impacts on infrastructure costs or municipal costs such as police, fire, streets, or water/sewer were not included within the scope of this study. This study reports on these analyses as well as discussions with other communities where caps have been put in place, both successfully and not so successfully.

This study relied upon information provided by the Town of Barnstable, reports done by the Information Systems Department of Barnstable, the Barnstable Building Department, the Cape Cod Commission, and best available data from the Department of Labor Statistics, the US Census of Wholesale and Retail Trade, the US Consumer Expenditure Survey, and Sales and Marketing Management magazine's "2000 Survey of Buying Power." It is FXM's understanding that if a building cap is put in place, it will only be applied to new residential permits, not remodels/additions, and not commercial property. FXM was also told that any subdivisions from the past eight years are grandfathered in terms of the right to build, but the use of the permit must still be used within the limits set by the building cap. The figures that follow relate to the local impact, not regional, and local was defined by the town to include all of the Town of Barnstable, but not any adjacent towns. FXM was given a hypothetical example of a cap to test for impact of eleven (11) permits per month of which eight (8) are market rate and three (3) are affordable, by the year 2005. Between 2001 and 2005, there is a phased reduction in the market rate units, starting with eleven per month in 2002, ten in the year 2003, and nine in 2004, and reaching the desired cap of eight market rate units per month in 2005. In each of these years, the number of affordable units is kept at three per month. All of the figures generated in this report are meant to indicate relative values with and without a cap. An impact is a proportionate measure of one condition, in this case the condition of a building cap, as a percentage of gain or loss against the current condition, or current level of permitting. If the building cap numbers should change, the economic effects change proportionally.

Approximately 25 individuals were interviewed for this study, including Town of Barnstable officials, contractors, building supply company personnel, school administrators, and officials from other communities. Statistical data gathered from national or state surveys was tested for reasonableness by questioning those directly affected within the town. It was believed that the way to determine the level of impact of a change in the number of new residential building permits was to use the average permit numbers and values over the past several years as a measure of dollars put into the local economy. With the help of Ken Byrne in Information Systems, numbers, and values of permits over the past five years since the data were computerized were accumulated and categorized by year, type, and locality. It was later learned that the valuation process for obtaining a building permit changed in the past year or so to reflect more the cost of the permit, and less the actual value of the construction. As such, data from the years 2000 and 2001 were not used. It is in the year 2000 that the average values jumped by over 40%; values had been relatively consistent prior to that year. It is argued that before this change, the face value of the permit was less than actual value. Whether this is true is not critical to this study. The point of this study is to show relative impact, not actual, such that a consistently lower value will yield the same percentage relationship to any change in the numbers as would a consistently higher value.

LOCAL ECONOMIC IMPACT OF NEW CONSTRUCTION

Rather than use theoretical multiplier effects that can be argued as too high or too low, FXM Associates did a literal tracking of the money spent in permitted construction on a local level. The analysis shows strong leakage of total permit value due to out of town labor, supplies, and spending. The numbers and values of residential permits, both new and remodel/add, were averaged for the years 1996 through 1999 for a total average value of $61,500,000 per year. Of that, approximately half is attributable to labor and half to materials. On the labor side, an estimate of 65% was applied to the total value of construction labor to represent that portion of labor done by local contractors and subcontractors. This figure was derived from names and zip codes on the actual permits, as well as answers given by local contractors and people in the building trades. (The range given was anywhere from 50% to as high as 90%.) That 65% of the local labor component of total permit value can then be used to generate the number of workers involved by dividing by the average wage for construction trade workers in Barnstable (Mass. Department of Labor, Division of Employment Statistics). Total spending from earnings was determined using data from the U.S. Consumer Expenditure Survey appropriate for the average wages paid. This figure is further reduced by the amount of money spent by individuals in local shops and services, versus money spent out of town. Again, a conservative figure of approximately 55% was used to reflect the amount of money spent locally. Typically, 60% to 65% is used for towns of the size (population) of Barnstable, but it was felt that town lines on the Cape are more often crossed due to the smaller physical size and more regional shopping view of the Cape as divided into the upper, mid, and outer Cape regions, so a slightly lower percentage is used. (Retail sales within the Town of Barnstable were 27% of the Barnstable County total in 2000.) After all of the subtractions for out of town leakage, a total spending from earnings by local construction and related industry employees in the Town of Barnstable was calculated based on current levels of building permits issued.

This figure is arguably further reduced if one considers how and when people spend their earned income. If the jobs resulting from fewer building permits are in fact not lost, but displaced to construction outside of town, then those earnings are not completely lost to the local economy. What is spent during the day, and on the job, would be lost if, for example, a Barnstable builder were building in Sandwich or Orleans. This figure, which includes some meals, drinks, incidentals, gas, etc., could range from a low of $9 per diem, based on using a few selected items from the 1998 Consumer Expenditure Survey, to a midpoint of $12 per diem, including 50% of discretionary spending for five out of seven days per week, to a high of $35 per diem, from discussions with general contractors themselves. The midpoint figure of $12.00 per diem was used, but the results should be interpreted as representing the middle ground of a real range of actual spending lost. It is further assumed, based on interviews with a sample of local contractors, that roughly half of the earnings lost to local builders from reduced single family construction in Barnstable would be replaced by local contractors having projects elsewhere on the Cape.

The same process was used for the materials side of construction value. Materials constitute roughly half of the total value of new single family home construction, and of that half, a portion represents the manufacture of the goods themselves, and the balance represents payments to employees in the manufacture, wholesale, and retail ends of distribution. There are no building goods being produced in Barnstable. The number of employees was derived by using the average sales per employee for building materials at the wholesale level. The average wage for employees in these fields was applied and a total earnings figure was calculated. Of these earnings, it was again assumed that roughly 55% is spent in town. Spending from earnings by those employed in building supplies and materials in the Town of Barnstable was also determined based on current levels of building permits issued.

The recent per year average impacts of residential construction in Barnstable are as follows:

Labor	Materials
$19,680,000 local earnings	$2,600,000 local earnings
$32,600 average wage	$29,100 average wage
604 person-years of employment	89 person-years of employment in sale of building materials
$10,627,000 in local spending	$1,404,000 in local spending

These figures could be used as a benchmark for comparison to any change in the overall permit value from the $61,500,000 average per year figure used.

EFFECTS UNDER THE CAP

If a building cap of eight market rate units and three affordable units were applied by the year 2005, it would affect local earnings and employment opportunities. Remodels/additions would not be significantly affected (more discussion of this will follow in the next section of this report). New permit numbers would be reduced from an average of 230 for all new residential market rate permits to 96 permits, which have an

average value of $171,700 per permit. Affordable units would generate an additional 36 permits, at an average value of $90,000 each.

Totals under a phased down building cap to 11 units (8 market/3 affordable) are as follows (dollars are shown in '000,000s; reduction percent is over current averages):

Year	Mkt	Afford	New Value		Remod Value		Total Value	Percent Reduction
2001	180	0	$30.9	+	$22.0	=	$52.9	14%
2002	132	36	$25.9	+	$22.0	=	$47.9	22%
2003	120	36	$23.8	+	$22.0	=	$45.8	25%
2004	108	36	$21.8	+	$22.0	=	$43.8	29%
2005	96	36	$19.7	+	$22.0	=	$41.7	32%

If the reduction were to be taken in its entirety, without any further adjustments for the time value of money, then over the five years being calculated there would be an overall loss in permit value of $74,300,000, or an annual average reduction of $14,900,000. This represents an average reduction in value of 24.2% for each of these five years. If the cap were to be kept in place at eight market rate and three affordable per month beyond 2005, the ongoing impact would be an average annual reduction of $19,800,000, or 32% down from average current levels.

Interim Years: A 24.2% average reduction in construction value for the interim years is assessed to affect the local economy as follows:

$2,600,000 per year in reduced spending by building trades employees

$340,000 per year in reduced spending by employees of materials suppliers

168 reduction in person-years of employment

Evidence from local builders suggests that approximately half of the builders could find replacement construction jobs on the Cape, in locations that are not so far as to require new building suppliers or different subcontracting crews. Under this scenario, their spending habits are likely to change only to the extent of their daytime spending, which FXM Associates estimates at $12.00 per calendar day. Under this scenario, the economic impact from reduced contractor spending due to a local building cap would be approximately $1,840,000 on average per year for the years 2001 through 2005.

Of the 168 persons in the building trades directly affected by the building cap who do not go to nearby towns for work, some will find other options to stay in the trades. Although the spinoff to remodels and additions would not be expected to have a substantial impact on built value (more on this subject in the next section), it is likely to absorb some percentage of the displaced employment. Entrepreneurial efforts within the trades are also expected. Town officials have spoken of the pent up demand for individual contracting, repair, and finish carpentry. With new homes taking up the time and effort of most people in the trades, there may be a substantial level of work left undone on the existing stock of housing in Barnstable. Assuming that replacement jobs in other Cape towns absorb 50% of displaced employment and pent up demand for individual tradespeople absorbs another 20%, the impact in terms of jobs is approximately 50 person-years of employment on average per year for the years 2001 through 2005.

Steady-state Years (2005 and beyond): Assuming the building cap were to stay in place beyond 2005, the ongoing annual economic impact of a 32% reduction over current levels in terms of dollars and jobs is estimated. These figures are not in addition to those outlined above, but are simply shown to compare the future steady-state level of construction under the building cap relative to current levels.

$3,400,000 in reduced spending by building trades employees

$450,000 in reduced spending by employees of materials suppliers

222 reduction in person-years of employment

As previously noted, one scenario assumes that many construction and related workers would find jobs out of town and would continue to live and spend much of their earnings within the town of Barnstable. Others would find work within the existing demand for repairs and renovations. Reduced employee spending would be $2,400,000 per year if

half of the contractors' current work in Barnstable were replaced by work out of town, and another 20% were to find jobs in building trades other than new residential within the town. The reduction in employment under this scenario would be 67 persons during the years beyond 2004, when the building cap of eight market and three affordable units per year is in place.

In addition to the calculated assessment of economic impact, contractors and building supply company personnel were contacted. Their opinions and data both helped determine some of the figures used in the calculations and also contributed to the qualitative understanding of potential effects. Contractors whose practice is concentrated on remodels and additions did not feel that they would be affected to a measurable degree. The larger builders and developer/builders of new residential construction also felt that they would be little affected. Their reasons, however, were that they would simply look out of town for new work. All felt that, for a number of reasons, the number of permits is decreasing through market and related supply factors. The average builder/ developer in the late 1980s did 100 + subdivision units each, while today that figure is approximately 10 each; land is simply not available to the extent it once was. This is in part due to the high level of construction in the 1980s, the land bank, conservation and wetlands restrictions, and severe site constraints of some of the remaining lots. A second factor in the reduction of permits is the effect of regulation by the town and by the Cape Cod Commission, which has contributed to longer lead time and expenses to single family home construction on undeveloped lots.

A building cap that dramatically changes existing patterns may cause aberrant swings in behavior, because of a fear of the future, before it settles into a pattern. The 1990s have seen a consistent pattern of roughly 225 permits per year. Consistency allows builders and suppliers to plan and hold current employment levels. A rush to get in before a cap is enacted, or to build grandfathered lots earlier than planned to insure against any future changes, promotes a hiring and firing pattern in employment and does little to limit or alter construction in the short run. By back-dating the effective date for the building cap, by phasing down to the desired permit level, and by including grandfathered subdivision lots within the cap, the Town of Barnstable may avoid pitfalls that other towns have fallen into. The transition to a building cap should therefore be smoother, with fewer swings in employment or sudden, short increases in the number of permits sought.

In the Town of Barnstable, wages paid to those in the building trades on projects within the town constitute about one-third of all wages of construction employment within firms based in Barnstable. If approximately one-fourth of that were lost with a building cap, that would mean an overall loss of 8.3% (1/12) of construction wages and therefore local spending thereafter. Based on total retail sales in Barnstable of $1.1 billion in year 2000,

reduced local spending by construction and related industry workers would represent 0.4% of townwide retail sales (1/2 of one percent).

IMPACT ON REMODELS/ADDITIONS

It would appear logical that if new permits were reduced, some of the slack would be picked up in the form of a higher number of remodels and additions. In terms of number of permits, remodels/additions constitute 70% of all permits issued over the past 5-1/3 years, but only 34% of the total value of residential construction. Annually, the proportion of remodels/additions to new construction has remained quite constant. Of that, approximately 45% of the total number of permits are obtained by Barnstable contractors, representing roughly 55% of the total permit value over the latter half of the 1990s. This is a smaller percentage of the local work force than for new construction, which comprised 65% of the total permit value, so that even if the numbers changed, it would have less of an impact than if the number of new permits changed. In fact, it was felt by those interviewed that the numbers of remodels/additions would remain unchanged if a building cap were in effect, regardless of how severe or moderate the cap might be. According to the builders, there are those who do remodels and those who do new, and they do not often mix. To try to quantify this opinion, FXM staff spoke to officials in two other towns who have experience with building caps. Both Nantucket and Sandwich were approached to share their experiences and to determine if the numbers of remodels increased as a result of a reduction in new permits. Both said no, with the exception of tear-downs and rebuilds. Smaller houses, on lots that become increasingly valuable as availability decreases, are sold to make way for what is essentially new construction, but by keeping a wall or two, can be permitted as a remodel. This does not increase the number of dwelling units in a town, but does increase its density in terms of number of bedrooms.

In the case of Nantucket, where a building cap has been tried on at least two different occasions, and both times has been repealed, the number of tear-downs increased soon after the cap was enacted. The value of remodel or replacement permits increased, although actual numbers of permits stayed somewhat constant. In Sandwich, the building cap of 170 new permits per year was a modest adjustment to the prior level of permits issued. The market itself had brought the numbers down through the 1990s and increasingly in recent years. Since it was put in place, the number of permits, approximately 150 a year, and only 105 in 2000, has not reached the cap. True remodels and additions have not increased, again with the exception of an increase in tear-downs and rebuilds in the higher valued sections of town. The number of rebuilds is too small a component overall to be a factor in the economic impact outlined in the previous section. It might lessen the economic impact 1% to 2% on the building trades, but increase the impact on the town in terms of infrastructure and service costs. The other factor to

consider for the future is that the 500 to 800 homes built each year in the mid- to late 1980s will be in need of remodeling and repair in the not too distant future. This may contribute to a higher percentage of construction value going to remodels than the current 34%. It is unlikely, however, that the work would be done by the local long-standing builders of new homes that now comprise the majority of work that make up the building trade's value.

Although the number of remodels and additions may not change significantly with a building cap, town officials have indicated that there is pent up demand for smaller contracting jobs. If crews are downsizing with fewer new homes to build, the subcontractors and independent builders are likely to augment their work load with more repair, upgrade, and home improvement jobs. As mentioned above, the larger building and development companies would go to other towns to build as long as there are opportunities elsewhere. The smaller companies and individuals in the trades may be more likely to stay local and fill the existing need for contracting services on existing buildings.

AFFORDABLE HOUSING

According to the Town of Barnstable officials, a goal of the town is to have a total of 10% of the townwide housing inventory be "affordable." According to the Planning Department, this would mean a total of 1,100 units, or an additional 631 units based on current inventory. The Housing Authority had slightly different figures of 1,857 units in total, which would include an additional 1,000 units over current levels. The Housing Authority has an aggressive plan for achieving 830 units of affordable housing over the next three years. Of these units, 405 units could be created by upgrading and/or rebuilding units that already exist within the town. Their plan also calls for 270 new units of affordable housing to be built on town-owned land (105 units) or on land to be acquired (165 units). The cost of the latter is unknown but would need to be addressed as an important added fiscal cost. Another component of the proposed affordable units (one-third of the total) are to be privately developed. The pace of development of new units exceeds the numbers suggested under the guidelines of the proposed building cap of three per month. These units could be accommodated at the building cap rate of 36 per year if the Housing Authority's goals were stretched out over 11 to 12 years instead of three. However, to achieve all of what is proposed and within the time frame suggested, approximately twelve units per month would need to be built, or 144 units per year for each of the next three years, for a total of 425 new units of housing. These units would be in addition to the market rate housing of 100 to 130 units per year being suggested under the cap.

The Housing Authority has an active list of approximately 1,400 persons or households with immediate need for moderately priced housing. Of that, approximately 570 are Barnstable residents. With the preference system in place for Barnstable residents, even with open lottery for the last 30%, it is likely that at least 50% of the 830 total proposed units, and up to 100% of the 405 units in existing buildings would be filled by current Barnstable residents. Authority officials explained that there are currently a large number of people in Barnstable living at financial risk, where more than 50% of their income is spent on housing costs, or people are doubling up in houses or living in substandard housing. These conditions would be greatly alleviated if the existing housing used for lower income individuals were improved or rebuilt to accommodate the existing need. It would also do little to change the overall number of units of housing in the town, and would not change the population, either of adults or children. The Housing Authority felt that 70% to 90% of the demand for affordable units would come from existing need within the town. Others felt the numbers would be significantly less and would draw from other towns where affordability is not available. Assuming the figure is 60% of the 830 proposed units, or 500 units, then that entire demand could be met within two years by using existing buildings and operating within the proposed building cap for new units. This would work within the stated goals for growth within the town and would not overly increase the building inventory or overall population.

Builders and developers building within the town were asked if they would begin to build more affordable units if market rate housing were seriously curtailed. The answer was a definitive no. Private development of affordable units on market value lots was beyond the range of profitability according to those interviewed. Town-owned land would therefore be a necessity to encourage development at all. The less veteran builders without any inventory of subdivision units or without the track record to get work out of town are more likely to have interest in building affordable units than those builders who are more established and can afford to be more selective about their next jobs. The cost to build a new, two-bedroom, two-bathroom home, even if done with the most moderate of finishes and dimensions (24 feet by 32 feet), is approximately $120,000. If it were to sell for $110,000 to be within the range of affordable, there would be little motivation for a developer to build it. To encourage affordable housing development despite this financial burden, point systems have been used in other communities. In Nantucket, for example, affordable units were needed for Nantucket's existing year-round population, and dormitory style housing was necessary for many of the employees needed to service the hotels, restaurants, and shops that depend on the summer tourist population. A point system was tried that allowed market rate units to be built if a certain amount of local or employee housing was built. Unfortunately, loopholes in the regulations resulted in permits being bought for money rather than earned by affordable housing construction. A well thought out system that ties builders/developers to at least one unit of affordable housing for every few market rate permits issued is another way of increasing the number of new affordable housing units in Barnstable. In both Sandwich and Nantucket, building caps exempted affordable housing. In both these communities, the issue of growth and its cost in terms of infrastructure and town character were separate issues from accommodating the towns' needs for affordable housing.

ACHIEVING TOTAL BUILDOUT

An April 5, 2001, Staff Report from the DCPC and the Planning Department indicate that 2,685 single family lots are left under current two-acre zoning. The 2000 Census data is not yet available, but using 1990 figures and adding known new permits over the past decade, plus an estimate of the multi-family units and unbuilt units, generates a total number of units at buildout of just over 29,500. Many argue that the 2,685 figure is overstated, but even if every lot accommodated a house, the overall number of lots would be increased by less than 10% over current levels at buildout. If some of those lots accommodate affordable units, especially if meeting existing local need, then numbers of units might increase, but population would not. Given the level of skepticism over the 2,685 figure among those in the building trades, it is suggested that the lots be investigated to determine a level of realistic development. Lots may be in wetland areas or have such severe site constraints as to be deemed undevelopable. This effort could be helpful in continuing the current trend of trust between builders and planners in Barnstable that has been strained in other growth managed communities.

If all of the approximately 2,500 lots are assumed to be left, including the grandfathered subdivision lots, and if the current rate of new residential permits were to continue, it would take 12 years to achieve buildout. If a suggested cap of 132 permits per year were in place by 2005, using the schedule shown on page 4, it would take approximately eighteen years to reach buildout. Both the unstructured and the capped levels of building could accommodate the 425 units of new affordable units within the 12- or 18-year time frames at a rate of 36 per year.

There is a time value to the money invested in either scenario. Housing values were kept constant in this comparative calculation. The figure of $171,700 is used as the average value of a new market rate unit, and $90,000 is used as the average value of a new affordable unit. It is further assumed that the number of affordable units in the uncapped scenario is 10% (20 of the 220 total permits) and that it is 27% in the capped version (36 of the 132 total permits). At a reinvestment rate of 9%, there is approximately a $86,000,000 difference in the present value of construction between these two scenarios. Both the lower per year dollar value being infused into the local economy, as well as the longer amount of time the community would have to wait for this money to be put into the system, means that there is an $86,000,000 advantage to the local economy and tax base from the faster buildout. To isolate the factors of time and permit dollar value, the valuations were all set at $171,700/permit for each of two timelines, one with 220 per year and the other with 132 per year, until buildout. The value of time is the major factor in the comparison of the two scenarios. The calculation of an $86,000,000 overall present

value over the 12 or 18 years until buildout, or a $1,500,000 annual reinvestment (at 9%) advantage to the faster buildout, is measuring only the financial impact of the value of labor and materials of building 2,500 units of housing sooner rather than later. In the first section of this report, FXM Associates calculated that the impact on local spending would be reduced to 19.5% of the overall economic impact through leakage to outside labor and spending. The local impact of the timing of the permitting process would therefore also be reduced, to $16,800,000 overall, or $300,000 per year. Beyond the $12,030,000 of direct spending from building 220 units per year, there would be another $300,000 a year, or $16,800,000 overall, that could be generated by putting those dollars into the local economy to be spent, re-spent, earned, and re-earned sooner rather than later. The financial impact would be further compounded if the tax value of immediately having an inventory of more highly valued property is taken into account. The end state for contractors dependent on work in Barnstable comes sooner in the non-capped market buildout scenario.

FISCAL EFFECTS

A building cap on new residential permits that limits the number of market rate units and encourages a higher number of affordable units, relative to current conditions, would have a fiscal impact on the town on several levels. It is beyond the scope of this report to assess the extent of that impact in terms of tax revenue, education costs, and perhaps the most serious impact, in terms of the strain on the already stressed infrastructure of the town. A full impact study would reveal both the overall, or average, cost and benefit of limiting growth, as well as the marginal costs from possible additions to infrastructure and programs, which would require a more detailed interview and analysis process.

The Town of Barnstable is facing a serious challenge in meeting its capital improvement requirements. Several individuals interviewed said they believe that a new school is needed now, and a tax override of $6,000,000 to $7,000,000 is being considered. The nitrogen management program was also mentioned by many interviewees as a high priority for the town, with a five-year cost of $51,000,000. The transportation system improvements including drainage, sidewalks, and streetscape work add another $32,000,000 over the next five years. In total the town is looking at roughly $120,000,000, including a lower school, in capital improvements over the next five years, only a portion of which has outside sources of revenue for funding.

SUMMARY

A building cap would have an economic (spending and jobs), a financial (time value), and fiscal (revenue/expenditures) impact on the local economy. Affordable housing substituting for some market rate units within the cap would have an impact on the dollar effect of the cap. The current level of residential building activity in the Town of Barnstable generates $12,000,000 in local spending each year and supports approximately 700 jobs. A building cap that would reach 11 permits per month, including eight market rate units and three affordable units, over the next four years would reduce that economic impact by 24.2% each year while the program is phased in, and ultimately would reduce the economic impact of the building industry on the local economy by 32%, assuming that these jobs are lost. These percentages translate to approximately $3,000,000 in reduced spending and 170 person-years of employment during the initial years, and $3,850,000 and 222 person-years of employment for the years 2005 and beyond. These calculated levels of economic impact could be reduced if the loss of construction in Barnstable were substituted with work in other Cape towns. Many contractors stated that they would take their work to other towns, and other, smaller businesses would do more of the available local work.

The decrease in total residential construction value from reductions in the new construction side of the business would not be offset by an increase in the number of remodels and additions. Their value might increase as some existing homes are rebuilt as new to avoid the limitations of a building cap, but the overall numbers of remodels are not likely to change in the short run. Existing builders and developers would also not be likely to fill in their work loads caused by the reduction of new units by doing more affordable housing. The profit incentive is not there, even if the homes are built on town-owned land. The Housing Authority's three-year plan for increasing the number of affordable housing units by 830, of which 425 would be new and 405 would be in existing buildings, is aggressive. The new units would require a pace of 12 units per month to be built within that time frame, which far exceeds the three per month being considered under the building cap. The issue of meeting demand for affordable housing has been dealt with separately from the efforts to control growth with a building cap in other communities.

A building cap would have the financial impact of extending the time until buildout is reached. Assuming all of the approximately 2,500 developable lots are built, it would take 12 years under the current rate of construction and 18 years under the phased down capped rate of construction to reach buildout. This slower infusion of dollars into the local economy would cost between $16,000,000 and $17,000,000 over the next 12 to 18 years, or $300,000 annually. These calculations do not take into account the higher cost in terms of infrastructure that a faster pace of development would have on the local economy and fiscal costs to the town.

The review of fiscal impacts was limited to tax revenue and school expenditure and therefore not sufficiently representative to be shown here. Other income sources were not investigated, nor were the many other municipal and infrastructure costs associated with current versus capped growth. The only factors that might be worth noting are that school enrollment has been relatively flat over the past few years, despite the increase of 225 permits per year and 484 new homes actually built in the past three years. These homes have largely been built for retirees and for vacationers. The average new home over the past three years is assessed at $500,000, which generates $5,500 each year in taxes under current property tax rates. While the cost to educate a child in Barnstable is currently quite low compared to other towns, at $6,100, even these more expensive homes cannot independently support the cost of educating a child in the public schools. The town is currently supporting a ratio where for every one household with an enrolled student, there are two households with none. If that ratio were to change, if the average price of new homes were reduced, or if the budget were to change to include related capital improvement projects, then taxes would need to be increased.

These different calculated measures of impact of a building cap can be used to weigh the cost of achieving town goals. The goal is to control growth, make it more predictable, slower and in tune with the infrastructure needs of the town. A building cap is designed to be a tool by which a town can control growth in the short run, while developing solutions to serious infrastructure needs, caused, in part, by uncontrolled growth in the past. Other communities suggest that vehicles other than a building cap be used to control growth. The change to 2-acre zoning was one suggestion that Barnstable has already instituted. Another is to manage the number of subdivision lots allowed per year. Again, Barnstable has already considered this option by including pre-approved subdivision units within their cap. If a cap is used in addition to these other vehicles, it was further suggested that the level initially be set at a number that was not too different from current levels, and to work down gradually. The Town of Barnstable's current proposal of 180 units in 2001, 168 in 2002, 156 units in 2003, 144 units in 2004, and finally 132 units in 2005 and beyond, may achieve the goals of the town with the least impact on the builders' livelihood. The immediate start date for the cap, its all-inclusive nature, and its phasing might allow Barnstable to avoid the pitfalls of other towns' experiences with building caps and entirely avoid a dramatic drop in permits issued. The other stated goal of the town is to have 10% of its housing stock qualify as affordable. The majority of the demand for this housing is coming from within the town so that the overall impact on the town would be negligible in terms of population and budgetary pressure. It is suggested that the new units of affordable housing being proposed be built at a gradual pace so that the goals of affordability are not in conflict with the goals of controlled growth.