Affordable Housing in Hanover, New Hampshire

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EXECUTIVE SUMMARY

This policy brief explores problems and policy solutions regarding affordable housing in both Hanover and New Hampshire as a whole. The current standard for affordable living, set by the Department of Housing and Urban Development, is that a family or individual should pay no more than 30 percent of their total income on housing in order to best afford other basic necessities such as food, transportation, and health care.[1] While Dartmouth College and the Dartmouth Hitchcock Medical Center (DHMC) remain the largest businesses in the Upper Valley area, most employees cannot afford the cost of living in Hanover and are forced to live in neighboring towns that are shouldering the "affordable housing burden."

While the Town of Hanover and Dartmouth College are working to address this growing need, as seen with proposals at Rivercrest and Grasse Road, there are other options that may complement and strengthen already existing efforts. Inclusionary zoning and Employer Assisted Housing (EAH) may serve to make Hanover a more affordable place to live for lower to middle-income households.

1. BACKGROUND INFORMATION

While Dartmouth College, DHMC and other businesses contribute to the Upper Valley economy by providing a wide range of job opportunities, many lower income employees are not able to live in Hanover due to high housing prices. This dynamic forces many employees to seek affordable housing in towns up to an hour away (from where they must commute daily). As a result, these surrounding towns must bear the burden of providing affordable housing to Hanover's employees. This becomes clear when considering that the majority of those employed by Dartmouth College reside outside of Hanover. Census figures for Hanover households can be misleading. It is important to make a distinction between those *living* in Hanover and those *working* in Hanover but living elsewhere. Because of the high cost of living in Hanover, many of those employed in Hanover are forced to live in surrounding areas. See Table 1 for more details about Dartmouth employees and their residences. The Affordable Housing Feasibility Study, produced by the Town of Hanover in July 2001, asserts that, "The perception of Hanover as a 'gated' community is becoming more prevalent in the Upper Valley, generating animosity from other communities who are shouldering the affordable housing burden and the associated impacts on schools and public infrastructure."[2]

Table 1: Dartmouth College Employment by Residence 2001[3]

Location	Number of Employees	Percent
Hanover	917	29%
Lebanon	561	18%
Enfield	218	7%
Lyme	116	4%
Thetford	143	5%
Norwich	192	6%
Hartford	293	9%
All other	698	22%

In 2006, Hanover had a total of 3,121 housing units with 2,217 single-family units, 898 multi-family units, and six manufactured housing units.[4] However, many factors may increase the cost of general housing and consequently reduce the number of moderate and low priced homes. These factors include building permit limitations, growth management ordinances, restrictions on attached and manufactured units, infrastructure requirements such as roads and sewers, impact fees, and setback requirements.[5] With the median price in 2006 for a Hanover home at $428,329, high prices may squeeze middle class families with incomes less than $100,000 out of Hanover. [6]

The current standard utilized by agencies such as the Department of Housing and Urban Development is that housing should cost no more than 30 percent of a family's total income. Paying anything more than 30 percent will adversely affect a family's ability to afford other basic necessities, such as food, clothing, transportation and medical care.[7] Families earning 60-80 percent of the median family income for the country are characterized as low-income families, while families earning 80-120 percent of the median family income are characterized as moderate-income families.

According to the fair share concept, which originated from the 1983 Mount Laurel cases in New Jersey, "all municipalities are responsible for providing a realistic opportunity for the construction of their fair share of the region's present need for low income housing" despite disincentives and restrictions such as potential impact on schools or strict zoning regulations.[8] This fair share responsibility, in addition to a commitment to its employees, directs Hanover and other communities to formulate policy to increase the availability of affordable housing. Affordable housing in Hanover would decrease the time spent commuting for Hanover employees, allow employees to enjoy the cultural and social attractions of Hanover, and have a positive impact on current traffic congestion. While these factors may compel towns to increase the affordable housing stock, potential decreases in tax revenue funneled to schools may serve as a disincentive for providing affordable housing. The current increase in Hanover of newly constructed homes costing over one million dollars may offset any decreases in tax revenue from affordable housing units.[9]

2. THE NEED FOR AFFORDABLE HOUSING

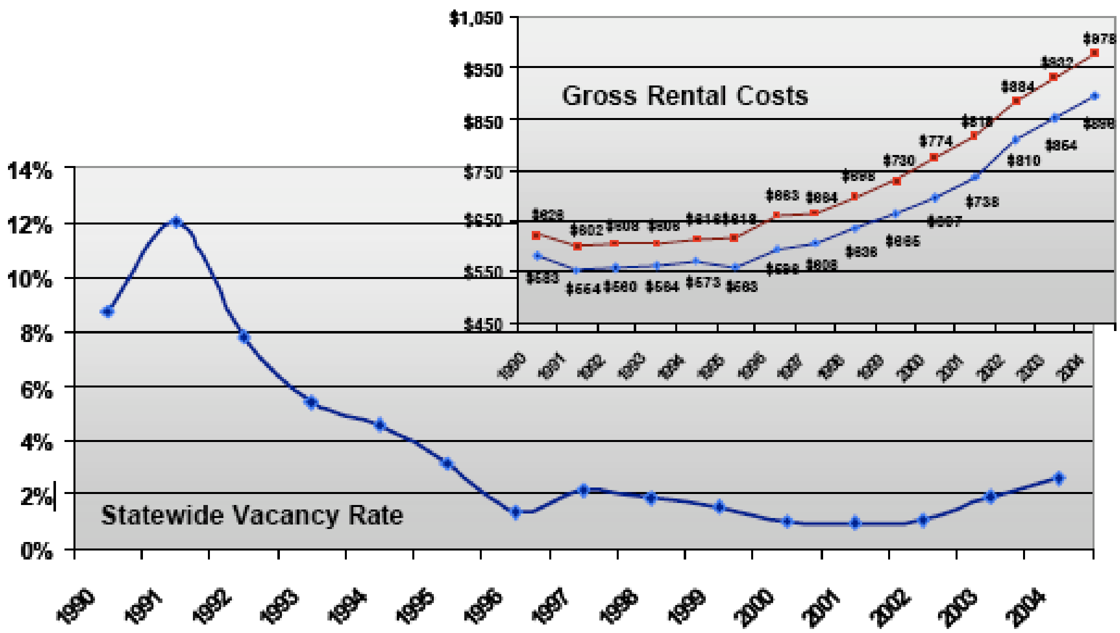
Businesses and institutions like Dartmouth College (which alone employs 3,200 individuals) sustain the Upper Valley economy by providing a range of occupational opportunities from highly paid professionals to blue collar workers, contributing to one of the lowest rates of unemployment in the nation.[10] See Table 2 for information regarding other businesses in the area. The availability of cultural and educational opportunities, the area's quality health care, and other similar factors contributed to CNN and *Money* Magazine ranking Hanover as the second best place to live in America in 2007. However, present in these rankings is an acknowledgement that "homes close to town can be pricey."[11] So pricey, in fact, that in the past few years the average home price has increased almost three times faster than the average income. Reports have been conducted by the Regional Planning Commission that identify affordable housing shortages in the following areas: Lakes Region, Nashua area, North Country, Southern New Hampshire, Southwestern New Hampshire, Strafford Regional, and the Upper Valley.[12]

Table 2: Largest Upper Valley Businesses[13]

Largest Businesses	Product/Service	Number of Employees	Year Established
Dartmouth College (including DHMC)	Education/Health Services	7,700	1769
Hypertherm	Plasma Arch Cutting	400	1968
Dartmouth Printing Co.	Printing	242	1938
Dimatix	Inket Print Heads	130	1984
Town of Hanover	Municipal Services	130	1761
Trumbull Nelson Construction Co.	Construction	120	--
Hanover Inn	Lodging	112	1780
Creare	Research & Development	83	1969

The demand for housing is also evident in the vacancy rates in New Hampshire. According to the U.S. Census Bureau, New Hampshire had the lowest vacancy rates in the Nation from 1998 to 2005.[14] In 2006, the vacancy rate increased from 3.7 percent to 4.2 percent. However, New Hampshire is still below the 5 percent rate that is commonly accepted as a "normal" market. Furthermore, New Hampshire is far below the national vacancy rate for rental housing, which is estimated at 10.1 percent for the first quarter of 2007.[15] Figure 1 illustrates vacancy rate trends in New Hampshire.

Figure 1: Vacancy Rates and Rental Costs in New Hampshire[16]



In New Hampshire, working families with children present the fastest growing segment of the housing population. With the median rent in New Hampshire being $774 per month, almost half of New Hampshire's renters were not able to afford the Fair Market Rent standard for a two-bedroom apartment in 1999.[17] Estimates in the Upper Valley have found that due to the housing market imbalance, approximately 4,800 households in the Hartford-Lebanon-Hanover labor market area and 1,900 in the Claremont labor market area are currently unable to afford the median cost of a two-bedroom rental unit.[18] In 1990, over 69,000 families in New Hampshire relied on the income of a single wage earner.[19] This statistic is particularly significant when compared to the average annual income of various occupations and the median purchase price for homes in Hanover and the rest of the Upper Valley. (Refer to Tables 3 and 4).

Table 3: Affordable Home Price Based on Occupational Income[20]

Occupation	Average Annual Income	Affordable Home Price
Bank Teller	$20,571	$61,713
Dental Assistant	$29,786	$89,358
Fire Fighter	$36,026	$108,078
Police Officer	$37,606	$112,818
Elementary School Teacher	$41,488	$124,464
Registered Nurse	$47,299	$141,897

Table 4: Median Home Price Based on Municipality[21]

Municipality/Area	All Homes Median Purchase Price	Non-condominium Median Purchase Price
Hanover	$282,000	$310,500
Lebanon	$129,250	$134,200
Claremont	$77,000	$77,000
Grantham	$140,750	$148,750
Enfield	$111,000	N/A
Canaan	N/A	N/A
Hanover-Lebanon Market Area	$120,000	$122,500

In the 1995 Fair Share Housing Analysis, the Upper Valley Lake Sunapee Regional Planning Commission found that approximately 31 percent of renters and 14 percent of owners of lower income households are spending more than 30 percent of their income for housing. Approximately one in five households in the region pay more than 30 percent for housing.[22] Table 5 provides a breakdown of costs of living in Hanover compared to other areas in New Hampshire and Vermont.

Table 5: Cost of Living Based on Location[23]

Cost of Living	Overall(Composite)	Food(15 %)	Housing (30%)	Utilities (6%)	Health (7%)	Trans. (10%)	Misc. (32%)
US Average	100	100	100	100	100	100	100
St. Johnsbury, VT	99.4	102.2	70.6	202.6	100.6	99.3	106.3
Claremont	99.7	102.6	80	152	109.5	101.9	106.9
Rutland, VT	100.3	105.9	77.4	167.9	101.5	103.5	106.9
Littleton	102.6	101.5	84.6	179.6	103	101.5	105.2
Brattleboro, VT	102.8	111.1	86.8	125.6	114.2	107	109.1
White River Jct., VT	103.1	104.6	84	171.9	108.6	102.4	107.2
Keene	104.4	110.4	96	108.7	117.5	106.8	107.4
Montpelier, VT	107.1	106	91.5	191.7	103.8	102.2	106.3
Enfield	109.2	101.5	103	179.6	103	101.5	105.2
Manchester	110.9	102.8	114.4	133.1	112	104.2	106.2
Lebanon	**111.2**	**101.5**	**108.7**	**179.6**	**103**	**101.5**	**105.2**
Concord	111.6	101.9	114.6	149.4	107.1	103.3	105.7
Burlington, VT	113.3	105.7	115.9	149.7	105.1	104.1	108.3
Nashua	117.7	102.8	133.5	133.1	112	104.2	106.2
Portsmouth	130.8	105.6	162.4	146.5	112.9	108.7	108.8
Hanover	157.7	101.5	237.7	179.6	103	101.5	105.2

Cost of living per area as compared to the US average (set at 100). For areas such as Portsmouth and Hanover, the cost of living is uniformly higher.

In an economic forecast conducted by Vermont's Economic and Policy Resources Inc., the Upper Valley would need to provide approximately 9,700 additional residential units to the current housing stock if the community's goal is to support the highest potential job growth over the next decade. Russ Thibeault, President of Applied Economic Research, predicts that in order to bring the market back into balance, one-third of these additional residential units are needed.[24] The *Upper Valley Housing Need Analysis*, reported that there is currently a shortage of 3,100 housing units and that by the end of the decade, that number is expected to triple if patterns continue unchanged.[25]

3. PAST AND PRESENT AFFORDABLE HOUSING INITIATIVES

3.1 Gile Hill Development

The most recent large affordable housing initiative in Hanover has been the Gile Hill development. In 2003, The Town of Hanover voted to donate a 21 acre, wooded tract of land to the nonprofit Twin Pine Housing Trust in order to address the need for affordable housing in Hanover. This development, located close to downtown Hanover, Centerra Business Park and DHMC is environmentally responsible, energy efficient, and affordable to moderate and lower income Hanover employees. As of February 2008, most utilities (such as water, sewer, electricity, and roads) were complete. Four buildings are scheduled to be completed early in the summer of 2008, with the remaining buildings to be completed in 2009. This potentially successful affordable housing development was made possible through nonprofit and town collaboration.[26]

3.2 Stakeholder: Twin Pine Housing Trust

The Twin Pine Housing Trust manages about 200 affordable housing units in the Upper Valley. The Gile Hill tract is its most recent project and was made possible through a generous donation of land from the Town of Hanover. The Twin Pine Housing Trust starts such projects by studying zoning and density regulations on land deemed suitable for development. According to the Housing Trust, strict zoning regulations and density issues were some of the biggest identified challenges to creating affordable housing. The nonprofit has also renovated older buildings, converting them into affordable apartments or single family homes.[27]

3.3 Stakeholder: Dartmouth College

In 2001, Dartmouth College pledged to house more students who traditionally lived "off campus" by building more dorms over the next decade. Since then, new dorm clusters have been built, and multiple dorms have been renovated to provide incentives for students to live on campus. As more students shift onto campus, more low-priced rental housing units are freed up for lower income college employees. While the College provides mortgage assistance to higher-end faculty and staff, low-income employees do not receive this same financial help.

3.3.1 Rivercrest and Sachem Village

Dartmouth College has also proposed 360 rental units between the Rivercrest and Sachem Village developments in Hanover and Lebanon, respectively. The Sachem Village development predominantly houses Dartmouth graduate students and their families. The Rivercrest development, a joint venture between Dartmouth College and DHMC, will replace its existing 61 rental housing units with a total of 273 housing units in a mix of single-family, duplex, townhouse and multi-family buildings. These units, sold at affordable prices, will provide eligible Dartmouth College and DHMC employees an opportunity to live in Hanover. It is hoped that this will eliminate the waiting list of employees who seek affordable housing. Though Rivercrest housing is limited to employees of the College and DHMC, it will also allow other housing in the Upper Valley to be more readily available. [28]

3.3.2 Grasse Road

Dartmouth's units at Grasse Road start at approximately $200,000, with the majority of the newer units selling between $250,000 and $340,000. Such prices are not affordable for households making less than $78,000 a year.[29] In May 2008, the residents of Hanover accepted a land exchange in which Dartmouth will give 10.2 acres of land located near Grasse Road for "recreational fields or affordable housing." According to Paul Olsen, Dartmouth's director of Real Estate, "The subdivision was done in order to create a place for housing for faculty. Housing is a typical recruitment issue, and Hanover housing is expensive – the College has done this over the years to provide more affordable options for employees." [30]

3.4 Upper Valley Housing Coalition

The Upper Valley Housing Coalition seeks to promote balanced communities by increasing affordable, market-rate, and mixed-income housing. As a partnership of businesses, communities, and non-profit organizations, the coalition also provides information and resources through education and awareness campaigns for those interested in learning more about affordable housing options available in the area. The Housing Coalition also created four action groups to better advocate and promote affordable housing – Community Outreach (COAG), Local Zoning and Land Use (LZLUAG), Public/Private Partnership (P/PPAG), and Legislative. In addition, the coalition also operates under three committees – the Public Outreach and Education, the Regional Housing Fund and the Housing Development and Policy Committee. [31]

4. INCLUSIONARY ZONING

4.1 Benefits of Inclusionary Zoning

Inclusionary zoning can be used to mix affordable housing units with market priced housing units and can prevent isolating lower and middle class families into economically segregated neighborhoods. This integration provides these families not only with a housing unit, but also with the opportunities and security that arises from living in a mixed class neighborhood. Mixed-class housing can be particularly beneficial to the poor in four ways: First, it will help in creating a social network and building social capital for low-income residents to help them find jobs. Second, it will lead to higher levels of accountability to norms and rules through increased informal and formal interaction with higher-income residents. This leads to increased order and safety for all residents. Third, the "Culture of Poverty" will be challenged in an environment in which low-income residents adapt more socially acceptable and constructive behavior. Finally, because external political and economic actors are more likely to respond due to the influence of higher-income residents, it will result in higher-quality goods and services available to all residents within the community.[32]

Inclusionary zoning works by modifying zoning regulations – the developer is allowed to build houses at a higher density if a certain percentage of the built houses are below market price. The town essentially offers the developer "free land" in exchange for affordable housing units. A sliding scale may be used to link land bonuses with the percentage of affordable housing units built.[33] Inclusionary zoning can either be mandatory or voluntary. Mandatory inclusionary zoning requires developers to build a certain percentage of affordable housing units in exchange for the building permits necessary to build. Voluntary inclusionary zoning encourages inclusion of affordable housing through incentives.[34] Various inclusionary zoning programs are described in Table 6.

Table 6: Distinguishing Features of Inclusionary Zoning[35]

Feature	Description
Size and types of developments subject to inclusionary requirements	Some programs are voluntary. Some impose inclusionary requirements only on large single-family projects. Some impose inclusionary requirements on all types of all sizes.
Percent of units that must be affordable	Some programs require only five percent of new units to be sold at a discount, others require percentages as high as 30 percent.
Depth and duration of price discounts	The depth of price discounts often varies by the target population. For example, many require that units must be made affordable to those at 80 percent of median household incomes. The period of affordability varies from 10 to 99 years.
Incentives or allowances offered in compensation	Most programs offer some form of incentives or compensation for providing affordable units. Incentives and compensation often include density bonuses, waivers of subdivision requirements, or fee reduction. Some programs permit payments in lieu of inclusionary units.

Under inclusionary zoning, housing units are only available to families making less than a certain percentage of the median income and are subject to regulation. Typically, they are required to stay affordable for a certain period of time. If the units were at below market prices for too long, purchasers would not be able to realize a good return on their investment, but the time period should not be too short or the units will disappear from the affordable housing pool too quickly. To address this concern, regulations are often imposed to prevent owners from selling the house for more than they originally paid (plus cost adjustments based on the Customer Price Index) for 10 years, assuring that the units remain affordable for at least that time. Despite these measures, local public housing agencies and nonprofits often buy up to 40 percent of the units to guarantee long term availability of affordable housing.

Many university towns (such as Chapel Hill, North Carolina and Amherst, Massachusetts) use inclusionary zoning to meet their affordable housing needs. Chapel

Hill encourages developers to either provide 15 percent of their houses at affordable prices if they build 5 or more units, pay a fee, or propose alternative measures to create affordable units equivalent to 15 percent of housing units built.[36] Amherst, Massachusetts ensures higher density developments if the developer devotes a minimum of 10 percent of the development to affordable units.[37] In California, 64 jurisdictions had adopted inclusionary zoning by 1994 and had produced over 25,000 affordable housing units.[38] Many communities have implemented a variety of inclusionary zoning ordinances that utilize a number of different incentives. Table 7 provides a deeper look into the types of economic incentives offered by inclusionary zoning.

Table 7: Economic Incentives Offered by Inclusionary Zoning Ordinances[39]

	Public Sector Advantages	**Public Sector Disadvantages**
Density Bonuses	• Minimal direct cost • Increases housing supply • Encourages compact development	• Less valuable in weak markets • Increases demand for public infrastructure
Expedited Permitting	• Minimal direct cost • Reduces private sector exposure • Increases housing supply	• Limited value in markets with few regulatory barriers
Fee Waivers	• Valuable in markets with exactions • Politically attractive	• Reduces public sector revenue • Limited value in markets with minimal development fees
Alternative Design Standards	• Minimal direct cost • Increase private sector flexibility	• May reduce housing quality • Market forces may require higher design standards
Cash Subsidies	• Efficient and easy to administer • Preferred by developers	• High direct cost • Requires funding source • Political opposition
Property Tax Abatement	• Efficient and easy to administer • Cost spread over multiple years	• Reduces public sector revenue • May diminish infrastructure quality

4.1.2 Montgomery County, Maryland as a Case Study

Montgomery County, Maryland is heralded as the most successful in terms of inclusionary zoning practices. Since 1974, the county has created nearly 10,000 affordable housing units under the "Moderately-Priced Dwelling Units" (MPDU) law. Montgomery County provides developers with a "density bonus," which allows the builder to construct 22 percent more units in the subdivision than what would typically be allowed, all within local planning constraints. For the construction of 50 units or more, the law mandates that the developer must set aside 12.5 to 15 percent of the units as affordable housing. While not penalizing private developers from building moderately priced housing units, the density bonus becomes an incentive in realizing the profit in constructing more affordable housing. Also, resale prices are controlled for 10 years while rent levels are controlled for 20 years.[40]

4. 2 Disadvantages of Inclusionary Zoning

Critics of inclusionary zoning question whether or not developers should assume the burden and cost of providing affordable housing. Developers equate inclusionary mandates with a tax on new developments, especially considering that there are no compensating benefits for developers to construct and maintain affordable housing. The constitutionality of inclusionary zoning has been questioned in the courts over three main provisions: 1) the Fifth Amendment prohibits taking without just compensation; 2) the due process clauses of the Fourteenth Amendment holds substantive and procedural protections; 3) the Fourteenth Amendment's equal protection clause.[41]

The use of density bonuses as an incentive for the construction of more affordable housing is reliant on a market-supply paradigm, which is based on the developer's ability to sell market-level units.[42] A density bonus may fail to encourage the development of affordable units if consumers interested in market rate housing are unwilling to purchase projects with a high concentration of low or moderate-income families. Moreover, density bonuses may fail to achieve the prescribed goals if consumers prefer low-density housing.[43]

While inclusionary zoning has the potential to create many affordable units, in practice it has created fewer units than expected. This may be because the current high-density incentives aren't enough to prompt developers to build affordable housing. Inclusionary zoning may be viable if a town is actively developing, but in a town with low residential construction due to limited land availability, inclusionary zoning may not be a primary avenue for creating affordable units. As mentioned earlier, the viability of the long-term stock of affordable units using current inclusionary zoning regulations is questionable because after the set number of years, the affordable housing unit may be sold at market price instead of the affordable price.

5. EMPLOYER ASSISTED HOUSING (EAH)

Lack of affordable housing negatively affects employers due to high recruitment costs and salaries to promote both recruitment and retention. These factors, in addition to potentially improving community-university relations, provide incentives for a university or medical center to assist in making housing affordable.[44] The following three models of EAH may be applicable to Hanover.

5.1 Financial Partner EAH Model

In this model, the university directly provides financial support to its employees through a reduction in the cost of purchasing a home. This can occur through low interest loans or cash given toward the down payment or a second mortgage. Some universities also reduce the transaction costs of mortgage fees or closing costs. While most universities offer support for purchasing a home, others also provide support for paying rents. These universities often partner with Fannie Mae, which offers products tailored to this EAH model. Financial support is a large incentive for the recruitment of potential employees and retention of existing employees.[45]

Universities that use this model include:[46]

- Harvard University: offers low interest mortgages
- Miami University: provides forgivable loans up to $10,000
- University of California system: offers secondary loans and longer terms loans
- Yale University: provides loan payment assistance

5.2 Service Provider EAH Model

In the service provider EAH model, the university provides services that assist employees with the home buying process. This model is often used in conjunction with the financial partner model: employees that participate in these services are eligible for direct financial support. Services include homebuyer education programs, help with mortgage applications, and credit counseling. The university typically partners with a provider that already supplies these services and usually pays a fee to extend the services to university employees. This model, like the financial partner model, improves employee recruitment and retention.[47]

Universities that use this model:[48]

- Niagara University and St. Louis University: offer counseling and education services
- University of Kentucky: offers counseling, education and housing information services

5.3 Developer EAH Model

In this model, universities direct their efforts toward actually building housing for their employees. The building of these new housing units may be coupled with financial assistance and/or with homebuyer education services to create a hybrid EAH model. Due to the costs and difficulties of entering the real estate market, this model is the least common. Some barriers include limited access to land, high costs of development, and challenges with community partnership and cooperation. The financial partner model is more cost effective in the short run.[49]

6. POLICY RECOMMENDATIONS

6.1 Policy Options for the Town of Hanover

Inclusionary zoning may be an option to increase affordable housing in the Hanover area. Mandating zoning ordinances with few exceptions can be more effective in increasing affordable housing stock compared to voluntary programs. "Mandatory with exceptions" allows a developer to avoid inclusionary requirements under certain conditions (specified by the Town) such as small project size or lack of funding. Moreover, having incentives for developers can help to improve the success of the program. Consulting with developers about how to structure density bonuses and other requirements can make incentives more meaningful and beneficial for both parties involved. "The most important practical consideration, because it is so often overlooked, is how inclusionary housing programs are implemented. Carefully drafted local decisions, effective monitoring systems, and the legal documentation to support long-term affordability are key elements of a program's success."[50] Both the Town of Hanover and Dartmouth College should support each other in substantially increasing the density throughout the community, especially in areas that will be developed.

6.2 Policy options for Dartmouth College

As a major employer in the area, Dartmouth College is a large stakeholder in the affordable housing issue. Some policy options that the College might pursue include:

1. Reevaluate the housing policy. In the current transitional housing policy, most of the College's housing units are transitional, meaning that a ten percent surcharge is added each year after three years to discourage lengthy to permanent residency. However, many residents remain in such housing because it is cheaper and allows the tenant to remain in Hanover instead of relocating.
2. Use the developer EAH model to develop on suitable properties owned by the college such as the Sullivan/Gibson tracts.
3. Continue to build more dorms and on-campus housing to meet the needs of undergraduates and graduate students. This will allow for more housing availability in the Hanover and Upper Valley area.

4. Using the Financial Partner EAH Model, the College could expand its financial benefits to low-income staff. Also, the college could increase the number of homes and rental units that are affordable to the income spectrum of faculty and staff.

7. CONCLUSION

While Dartmouth College, DHMC and other businesses contribute to the Upper Valley economy by providing a wide range of job opportunities, many lower income employees are not able to live in Hanover due to high housing prices. As a result, surrounding towns must bear the burden of providing affordable housing to Hanover's employees. In order to maintain its commitment to its employees and to the region, Hanover, Dartmouth College and DHMC should work together to formulate policy aimed at increasing the availability of affordable housing units.

While the Town of Hanover and Dartmouth College are working to address this growing need through the Rivercrest and Grasse Road developments, other options such as inclusionary zoning and employer assisted housing (EAH) may help to create more affordable housing units in Hanover.

Inclusionary zoning can help increase the affordable housing stock by modifying zoning regulations. Developers are provided with a high density development incentive if a certain percent of built houses are below the market price. The mixed class housing resulting from inclusionary zoning provides an opportunity for lower income residents to build social capital and expand their social networks. It may also challenge the "Culture of Poverty" by allowing low-income residents to adapt more socially acceptable and constructive behavior. Conversely, the idea of a mixed neighborhood may provide a disincentive for some consumers due to a close proximity to high concentrations of low or moderate-income families. In this case, the density bonus may fail to encourage the development of affordable units due to lack of demand. Inclusionary zoning may be viable if a town is actively developing, but in a town with low residential construction due to limited land availability, inclusionary zoning may not be a primary avenue for creating affordable units.

The Financial Partner, Service Provider and Developer Employer Assisted Housing (EAH) models can help regional employers such as Dartmouth College and DHMC assist their employees in finding affordable housing in Hanover. In the Financial Partner model, the university directly provides financial support to its employees through a reduction in the cost of purchasing a home. In the service provider EAH model, the university provides services that assist employers with the home buying process. This model is often used in conjunction with the financial partner model: employees that participate in these services are eligible for direct financial support. In the developer EAH model, universities direct their efforts toward actually building housing for their employees. This model is displayed through Dartmouth College's efforts in the Sachem Village, Rivercrest and Grasse Road developments. The building of these new housing units may be coupled with financial assistance and/or with homebuyer education services to create a hybrid EAH model.

As modeled by other towns, the most effective and viable policy option for Hanover may be partnering with the College, other businesses and not-for-profit stakeholders, such as the Twin Pine Housing Trust, to increase the affordable housing stock. The town can continue to support the College in setting goals for affordable housing and identifying viable College-owned lands for development. The Town may also continue partnering with the Twin Pine Housing Trust to support developments such as Gile Hill. While the Town of Hanover is not actively developing compared to other areas, it can use density bonuses and zoning changes to increase the stock of affordable housing through inclusionary zoning. These measures, when implemented appropriately, may help local employees by providing them with housing they can afford.

REFERENCES

[1] "Affordable Housing." Department of Housing and Urban Development. http://www.hud.gov/offices/cpd/affordablehousingindex.cfm
[2] "Town of Hanover Affordable Housing Feasibility Study." July 2001. http://web.valley.net/files/hanovernh/AffordableHousing.pdf
[3] "Upper Valley Housing Needs Analysis: Summary Report." August 2002. Applied Economic Research. http://www.uvhc.org/downloads/UVHOUS%7E1.PDF
[4] "Hanover, NH" http://www.nh.gov/nhes/elmi/htmlprofiles/hanover.html
[5] "Housing New Hampshire's Workforce." March 28, 2005. New Hampshire Housing Finance Authority. New Hampshire Charitable Foundation. http://www.workforcehousingnh.com/ImpactStudy_wcover.pdf
[6] "Best Places to Live: Top 100." http://money.cnn.com/galleries/2007/moneymag/0707/gallery.BPTL_top_100.moneymag/2.html
[7] "Affordable Housing." Ibid.
[8] "Southern Burlington County NAACP v. Township of Mt. Laurel (II)." 92 N.J. 158, 456 A. 2d 390 (1983). http://law.wustl.edu/landuselaw/mtlaurel.html
[9] "Town of Hanover Affordable Housing Feasibility Study." Ibid.
[10] "Town of Hanover Affordable Housing Feasibility Study." Ibid.
[11] "Best Places to Live: Top 100." Ibid.
[12] "Housing New Hampshire's Workforce." Ibid.
[13] "Hanover, NH" http://www.nh.gov/nhes/elmi/htmlprofiles/hanover.html
[14] "Housing Vacancies and Homeownership." U.S. Census Bureau. Annual Statistics. http://www.census.gov/hhes/www/housing/hvs/annual05/ann05t3.html
[15] *New Hampshire Housing Headlines*. Summer 2007. http://www.nhhfa.org/abt_docs/newsletter/summer2007.htm
[16] *New Hampshire Housing Headlines*. Summer 2007. Ibid.
[17] Blair, Sam. "Wages and Housing in New Hampshire." The New Hampshire Housing Forum. http://www.nhhousingforum.org/pdf/NHFA_Booklet.pdf
[18] Blair, Sam. Ibid.
[19] "The Housing Shortage: Seeking Regional Solutions." *RPC Newsletter*. Spring 2002. Upper Valley Lake Sunapee Regional Planning Commission. http://www.uvlsrpc.org/files/pdf/housing-shortage.pdf
[20] New Hampshire Economic and Labor Market Information Bureau. *New Hampshire Occupational Employment and Wages*. January 2005.
[21] New Hampshire Housing Finance Authority.
[22] "Chapter 7: Housing." Lebanon Master Plan. June 20, 2006. http://lebanonnh.virtualtownhall.net/public_documents/lebanonnh_plandocs/MasterPlan/07-Housingpercent20Adoptedpercent20062006.pdf
[23] "Sperling's Best Places." www.bestplaces.net
[24] "The Housing Shortage: Seeking Regional Solutions." Ibid.
[25] "Dispelling Myths About Affordable Housing in the Upper Valley." Upper Valley Housing Coalition. http://www.uvhc.org/downloads/DispellingMyths.pdf
[26] "FAQ." Twin Pines Housing Trust. http://www.tphtrust.org/html/faq.html
[27] "FAQ." Twin Pines Housing Trust. Ibid.
[28] Matthews, Susan. "College to Build More Employee Housing." January 29, 2008. http://thedartmouth.com/2008/01/29/news/rivercrest/
[29] "Town of Hanover Affordable Housing Feasibility Study." Ibid.
[30] Schpero, William. "Dartmouth Transfers 10.2 Acres to Hanover." *The Dartmouth*. May 16, 2008. http://thedartmouth.com/2008/05/16/news/transfer/
[31] "FAQ." Upper Valley Housing Coalition. http://www.uvhc.org/faq_5.html
[32] Joseph, Mark. "Is Mixed-Income Development an Antidote to Urban Poverty?" Case Western Reserve University. Fannie Mae Foundation. Volume 17, Issue 2. 2006. http://www.fanniemaefoundation.org/programs/hpd/pdf/hpd_1702_joseph.pdf

[33] Brown, Karen. The Brookings Institution Center on Urban and Metropolitan Policy. "Expanding Affordable Housing Through Inclusionary Zoning: Lessons From the Washington Metropolitan Area." October 2001. http://www.brookings.edu/~/media/Files/rc/reports/2001/10metropolitanpolicy_brown/inclusionary.pdf
[34] Kmiec, Douglas. "Zoning and Planning Deskbook." March 2005. http://www.townofchapelhill.org/DocumentView.asp?DID=863
[35] "Housing Market Impacts of Inclusionary Zoning." February 2008. National Center for Smart Growth Research and Education." February 2008. http://www.nahb.org/fileUpload_details.aspx?contentTypeID=3&contentID=90746&subContentID=138102
[36] "Affordable Housing Resolution" Town of Chapel Hill. 2000. http://www.townofchapelhill.org/index.asp?NID=1167
[37] "Housing Partnership – Fair Housing Committee FY 2007 Housing Report." Town of Amherst, Massachusetts. 2007. http://www.amherstma.gov/departments/Housing_Partnership -Fair_Housing_Committee/Housing_Report.pdf
[38] Porter, Doug. "The Missing Piece to the Affordable Housing Puzzle." National Association of Realtors. Winter 2003. http://www.realtor.org/smart_growth.nsf/Pages/ocg_winter2003_inclusionary_zoning?OpenDocument
[39] "Inclusionary Zoning: A Framework for Assessing the Advantages and Disadvantages." Homes for Working Families. May 2008. http://www.homesforworkingfamilies.org/resources.dyn/uncc_iz_national.pdf
[40] Porter, Dough. Ibid.
[41] Collins, Dobrah. Rawson, Michael. "Avoiding Constitutional Challenges to Inclusionary Zoning." National Housing Conference. February 2004. Vol. 3, Issue 1. http://www.nhc.org/pdf/pub_ahp_02_04.pdf
[42] Burchell, Robert. Galley, Catherine. "Inclusionary Zoning: A Viable Solution to the Affordable Housing Crisis?" http://www.ginsler.com/documents/NHC-2.html
[43] "Inclusionary Zoning: A Framework for Assessing the Advantages and Disadvantages." Ibid.
[44] Hoereth, Joseph, Packnett, Dwan, Perry David. Lincoln Institute of Land Policy. "University Employer-Assisted Housing: Models of University-Community Partnerships." 2007.
[45] Hoereth, Joseph, Packnett Dwan, Perry David. Ibid.
[46] Hoereth, Joseph, Packnett Dwan, Perry David. Ibid.
[47] Hoereth, Joseph, Packnett Dwan, Perry David. Ibid.
[48] Hoereth, Joseph, Packnett Dwan, Perry David. Ibid.
[49] Hoereth, Joseph, Packnett Dwan, Perry David. Ibid.
[50] Netter, Edith. "Inclusionary Zoning Guidelines for Cities and Towns." September 2000.