
HOUSING

Regional Housing Needs Assessment

-- PRELIMINARY DRAFT --
EXCERPT FROM REGIONAL MASTER PLAN – HOUSING CHAPTER

NHRSA §36:47 requires that “For the purpose of assisting municipalities in complying with RSA §674:2, III(m), each regional planning commission shall compile a regional housing needs assessment, which shall include an assessment of the regional need for housing for persons and families of all levels of income.” RSA §674:2, II(l) provides guidance for municipalities which include a housing section in their master plan, suggesting that any such section include a discussion of affordable housing based on the regional housing needs assessment performed by the regional planning commission. This document fulfills the requirements of RSA §36:47.

The Rockingham Planning Commission (RPC) developed its first Regional Housing Needs Assessment in 1989 as a component of its regional master plan. The assessment was updated in 1994 to incorporate data from the 1990 US Census. While RSA §36:47 requires that all regional planning commissions prepare regional housing needs assessments, the statute does not prescribe a methodology. An examination of the other planning commissions’ methodologies reveals that those commissions in the southern portion of New Hampshire developed methodologies similar to that previously utilized by the RPC. It is clear that the methodologies used in these assessments contained flaws; the various commissions have subsequently attempted to address these flaws.

The immediate purpose of this Regional Housing Needs Assessment is to quantify and project the demand for housing in the RPC region in the horizon year of 2010, as well as estimate the projected demand for housing by tenure (ownership vs. rental) and by income level. Information is provided in the “Existing Conditions and Trends” section of this chapter that assesses the current housing situation for elderly residents, specifically with regard to overpayment for housing. However, this document does not contain a projection of the number of elderly vs. non-elderly residents, or the expected level of housing overpayment by age.

While this Regional Housing Needs Assessment is an update to 1994 study, it does not follow the same structure and methodology used in the original assessment. The more general purpose for the Regional Housing Needs Assessment is to provide communities in the region with background information and analysis needed to develop their own housing needs assessments for master planning purposes. However, no effort has been made to analyze the specific housing needs and circumstances of individual communities. It should also be noted that this update of the Regional Housing Needs Assessment does not contain a fair-share apportionment, as was incorporated into the 1994 Regional Housing Needs Assessment. The purpose of the fair-share apportionment was to distribute the identified need for additional units of affordable

housing to the community level based on capacity to absorb the growth, equity and other factors. The RPC, and most of the other regional planning agencies in New Hampshire, found that the early fair-share appropriation methodologies were flawed.

In 2002 the New Hampshire Housing Finance Authority (NHHFA) hired a consultant to develop a single recommended methodology for projecting the demand on the housing supply on a statewide basis. It was the NHHFA's goal to also offer a subset of the methodology that could be applied at a regional level and that would ensure more consistency in the development of the regional housing needs studies, while still allowing each region the opportunity to tailor the methodology to address the region's own issues. The NHHFA also wished to develop optional methodologies for fair-share allocations of affordable housing. A committee including representatives from the NHHFA, the NH Office of State Planning and the regional planning commissions assisted in the development of the methodology.

This update to the RPC's 1994 Regional Housing Needs Assessment utilizes the housing production model developed by the NHHFA and released in October 2003. The following sections provide a brief description of the model and the projected housing supply needs for the RPC region, as well as information on households by income range that could be expected to have a high housing cost burden.

Draft NHHFA Housing Production Model

The NHHFA model presents three projections of housing supply needs for a defined region. Two of the projections are employment-driven and the third is based on the New Hampshire Office Energy & Planning's (formerly the NH Office of State Planning) population projections.

The first employment-based projection assumes that the RPC region maintains its share of the state's reported employment from 2000 through 2010. The second employment-based projection allocates employment growth to the region based on the growth in employment that occurred during the prior decade (1990-2000). The employment-driven projections essentially represent two scenarios that indicate the number of housing units needed (owner and renter) based on the rate of projected employment growth. They determine overall housing need based on a desired or optional ratio of housing-to-jobs. The third projection in the model is based on the population projections for 2010 released by the Office of Energy & Planning (OEP) in March 2003. In this model, future housing need is based on the desired or optional ratio housing-to-population.

The three approaches involve the following steps:

Housing Production Model Methodologies	
Employment-based (Constant Share and Growth Share approaches)	
Steps:	Explanation:
1. Apply annual growth rate of 1.6% to statewide employment to generate year 2010 employment forecast.	Growth rate of 1.6% from 2000-2010 was selected based on NH Div. of Employment Security projections.
2. Distribute employment to the each regional planning agency based on: A. the region's current (year 2000) share of total State employment. (Constant Share approach) B. the region's share of private sector employment growth during the decade 1990-2000 (Growth Share approach)	This step reflects the only difference between the two employment-based approaches.
3. Multiply 2010 employment by the year 2000 ratio of working residents to area employment to generate an estimate of working residents in 2010.	Assume stable ratio between working residents and area employment.
4. Multiply the projected # of working residents in 2010 by the year 2000 ratio of households to working residents to estimate the number of households in 2010.	Assume stable ratio between households and working residents.
5. Multiply projected # of households by 2.49 persons per household in 2010, yielding total persons living in housing units.	Average persons per household in 2010 was estimated at 98% of the 2000 average for the area, based on U.S. Census national projections.
6. Apply year 2000 owner/renter percentage split to the projected # of 2010 households.	Assume continued 2000 percentage split households into owner and renters.
7. Apply 1.5% vacancy rate for ownership units and 5% for rental units to generate total needed ownership and rental housing supply.	Pre-setting the vacancy rates at 1.5% and 5% implicitly corrects for current year housing shortage by assuming achievement of reasonably adequate housing choice.
8. Apply a factor of 0.17 to account for replacement of housing units lost to demolition/disaster.	Assume 1.7% of the base year housing supply will be replaced over the ten-year projection period.
9. Sum households, vacancy reserve and replacement to arrive at the total 2010 housing supply need.	Demand estimates do not include other housing unit production that may be generated by seasonal, occasional or second home use.
10. Subtract existing housing stock from 2010 housing supply need to calculate the housing growth estimate by tenure (ownership vs. rental)	
Population-based	
1. NH OEP 2010 population projection was the starting point for the population-based approach. Estimate of population in group quarters was made (assume same percentage split as in 2000) and subtracted from total population to arrive at estimate of persons living in households.	
2. Multiply projected # of residents in households by 2.49 persons per household in 2010, yielding total person living in housing units.	Average persons per household in 2010 was estimated at 2.49, or 98% of the 2000 average for the area, based on U.S. Census national projections.
3. Apply year 2000 owner/renter percentage split to the projected # of 2010 households.	Assume continued 2000 percentage split households into owner and renters.

4. Apply 1.5% vacancy rate for ownership units and 5% for rental units to generate total needed ownership and rental housing supply.	Pre-setting the vacancy rates at 1.5% and 5% implicitly corrects for current year housing shortage by assuming achievement of reasonably adequate housing choice.
5. Apply a factor of 0.17 to account for replacement of housing units lost to demolition/disaster.	Assume 1.7% of the base year housing supply will be replaced over the ten-year projection period.
6. Sum households, vacancy reserve and replacement to arrive at the total 2010 housing supply need.	
7. Subtract existing housing stock from 2010 housing supply need to calculate the housing growth estimate by tenure (ownership vs. rental)	Demand estimates do not include other housing unit production that may be generated by seasonal, occasional or second home use.

Before using the results of the model, it is important to recognize the differences in potential application of each of the three approaches. The value of having multiple employment-based production models is that the most appropriate approach (“constant” or “growth” share of employment) can be selected and relevant employment growth assumptions can be modified to represent alternative future scenarios. The several estimates of housing demand can then be compared to the demand level indicated by population growth projections.

Each of the three approaches was utilized to project the housing supply need for the RPC region for the year 2010. Table 1 summarizes selected assumptions and Table 2 contains the results of each of the three approaches.

	Housing Supply 1: Constant Share of Employment	Housing Supply 2: Growth Share of Employment	Housing Supply 3: Population based
Population, 2010	205,800	228,627	200,950
Households, 2010	81,633	90,687	79,708
Total housing demand, 2010	84,826	94,101	82,854
Avg. new housing units needed per year, 2000-2010	1,416	2,343	1,219
Ratio housing units to population, 2010*	0.41	0.41	0.41
Ratio available housing units to employment**	0.71	0.71	na

* In comparison, the RPC region’s year 2000 ratio of housing units to population is 0.39

** In comparison, the RPC region’s year 2000 ratio of housing units to employment was 0.70

Table 2
Comparison of Projected Housing Supply Need by Tenure, 2010
Rockingham Planning Commission Region

Tenure	Housing Supply 1: Constant share of projected emp. growth	Housing Supply 2: Growth share of projected emp. growth	Housing Supply 3: Population-based
Owner	63,461	70,400	61,986
Renter	21,364	23,701	20,868
Total	84,826	94,101	82,854
<i>Total existing ownership stock (2000)*</i>	52,944	52,944	52,944
<i>Total existing rental units (2000)**</i>	17,725	17,725	17,725
<i>Total stock</i>	70,669	70,669	70,669
PROJECTED NET HOUSING PRODUCTION NEED, 2000-2010 ROCKINGHAM PLANNING COMMISSION REGION			
Owner	10,517	17,456	9,042
Renter	3,639	5,976	3,143
Total	14,157	23,432	12,185

* Total ownership stock except those homes reported as sold but not occupied, or seasonal/occasional use

** Total rental units except those reported rented but not occupied, or seasonal/occasional use

The first employment-based model (Housing Supply 1) projects a total of approximately 84,800 housing units needed to house working residents in the RPC region in the year 2010. Accounting for existing housing stock, this translates into a total of about 1,400 units that would need to be added annually from the year 2000 through 2010.

The second employment-based model (Housing Supply 2) indicates that a total of 94,100 housing units will be needed to house working residents in the year 2010. Again, after factoring in the existing housing stock, this approach identifies the need for a total of 2,300 new housing units to be constructed annually from the year 2000 through 2010.

Utilizing the NH OEP population projections as a baseline (Housing Supply 3) yields a projected housing demand of approximately 82,900 housing units by the year 2010, or the need for 1,200 units to be constructed annually from the year 2000 through 2010.

To put these figures into the context of historical housing production, the RPC region added an average of 780 units added per year during the decade 1990-2000, and an average of 1,970 units per year from 1980-1990.¹

¹ There were a total of 49,052 housing units in the RPC region in 1980, a total of 68,727 units in 1990 and a total of 76,522 units in 2000. The total for the year 2000 reflects the loss of about 1,300 housing units at the former Pease Airforce Base between 1990 and 2000. (Source: *Current Estimates and Trends in New Hampshire's Housing Supply*, 1999 and 2001 Updates)

The large discrepancy between the two employment-based demand projections is due to the different assumptions regarding employment growth. Under the constant share approach (Housing Supply 1), the region maintains the same share of total State employment as it had in the year 2000, while the growth share approach assumes a continued increase in the region's share of total State employment equivalent to the rate as the previous decade (1990-2000). The growth share approach (Housing Supply 2) would obviously result in a higher employment estimate, as the RPC region experienced marked employment growth during the previous decade--attributable particularly to the development of the Pease International Tradeport and growth in Salem. It is questionable whether the region can sustain that level of employment growth in the future.

The variation between the employment-based and the population-based projections would appear to reflect the regional imbalance between jobs and housing distribution. The population-based approach does not take into consideration, or correct for, the current imbalance between jobs and housing in the RPC region. In more recent years, skyrocketing housing costs in the Seacoast have forced more people to seek less expensive housing outside of the region while maintaining employment in the region. While this is offset somewhat by the many residents in the region that work in Massachusetts, the population-based methodology does not provide an allowance for achieving a more equitable balance between jobs and housing in the region.

At this point, the constant share approach (Housing Supply 1) appears to provide the most appropriate methodology and set of assumptions from which to project future housing demand for the RPC region, and has been selected as the preferred method for projecting regional housing need. Subsequent tables in this section incorporate the constant share projections. Summaries of the current and projected housing scenarios using the constant share approach methodology are presented in Tables 3 and 4.

	2000 (existing)	2010 (projected demand)
Population	178,997	205,800
Employment	101,308	118,736
Renter Households	17,073	20,010
Owner Households	52,578	61,623
Total Rental stock (except rented but not occupied)	17,725	21,364
Total Ownership stock (except sold but not occupied, seasonal and occasional use)	52,944	63,461
Total housing stock occupied or available	70,669	84,825
Ratio total housing stock to employment	0.70	0.71
Ratio rental stock to employment	0.17	0.18
Ratio ownership stock to employment	0.52	0.53

	2000 (existing)	2010 (projected demand)*
Homeowners		
Under 30% MAI	3,896	3,948
Under 50% MAI	8,581	8,713
Under 60% MAI	11,243	11,385
Under 80% MAI	17,262	17,913
Under 100% MAI	23,732	25,374
Under 120% MAI	30,258	32,795
All Homeowners	52,578	63,461
Renters		
Under 30% MAI	3,713	4,880
Under 50% MAI	6,826	8,598
Under 60% MAI	8,333	10,438
Under 80% MAI	11,074	13,784
Under 100% MAI	12,974	16,102
Under 120% MAI	14,682	18,188
All Renters	17,073	21,364
Total Households		
Under 30% MAI	7,600	9,256
Under 50% MAI	15,392	18,745
Under 60% MAI	19,559	23,820
Under 80% MAI	28,316	34,485
Under 100% MAI	36,688	44,681
Under 120% MAI	44,923	54,710
All Households	69,651	84,826

MAI = Median area family income

* Using projections from Housing Supply 1 method
Applies Rockingham Co. income band split to
RPC homeowner, renter and hhld totals

Total housing need projections were taken further and an estimate developed of the number of homeowner and renter households by income band that could be expected to have a high housing cost burden (35% or more of income spent on housing) in the year 2010. This was done by applying the year 2000 Census ratios of overpayment by income band to the projected number of homeowners and renter households by income band for the year 2010. The estimate of households, by income band, expected to overpay (35% or more of income) for housing in 2010 is shown in Table 5.

Table 5 Overpayment for Housing, 1990, 2000 and 2010 Rockingham Planning Commission Region							
Renters Paying 35% + of Income to Rent							
	1990		2000		2010**		Change, 1990-00
Total paying 35% +	4,091		4,208		5,261		+117
Income Band	#	% of Income Band Paying 35% +	#	% of Income Band Paying 35%+	#	% of Income Band Paying 35%+	Change, 1990-00
Under 30% MAI	1,795	43.9%	2,438	57.9%	3,048	57.9%	643
Under 50% MAI	3,174	77.6%	3,581	85.1%	4,477	85.1%	407
Under 60% MAI	3,441	84.1%	3,971	94.4%	4,965	94.4%	530
Under 80% MAI	3,917	95.7%	4,099	97.4%	5,125	97.4%	182
Under 100% MAI	4,054	99.1%	4,157	98.8%	5,197	98.8%	103
Over 100% MAI	37	0.9%	51	1.2%	64	1.2%	14
SF Detached Homeowners* Paying 35% + of Income to Rent							
	1990		2000		2010**		Change, 1990-00
Total paying 35% +	6,229		7,132		10,941		+903
Income Band	#	% of Income Band Paying 35% +	#	% of Income Band Paying 35% +	#	% of Income Band Paying 35% +	Change, 1990-00
Under 30% MAI	1,399	22.5%	1,653	23.2%	2,536	23.2%	254
Under 50% MAI	2,250	36.1%	3,188	44.7%	4,891	44.7%	938
Under 60% MAI	2,772	44.5%	3,910	54.8%	5,998	54.8%	1,138
Under 80% MAI	3,793	60.9%	5,260	73.8%	8,069	73.8%	1,467
Under 100% MAI	4,644	74.6%	6,002	84.2%	9,207	84.2%	1,358
Over 100% MAI	1,585	25.4%	1,130	15.8%	1,734	15.8%	-455

Source: U.S. Census, NH Housing Finance Authority

* The Census Bureau definition excludes homes on lots > 10 acres, attached housing and mobile homes

** Using the Housing Supply 1 projection of housing production demand

MAI = Median Area Family Income

The 1990 and 2000 Census data in Table 5 shows that while there was relatively little change in the total number of households with a high housing cost burden between the years 1990 and 2000, there has been a significant increase in housing cost burden of the lower income renter households (those earning less than 60% of the median area income). Residents in this income band will continue to bear the highest burden for housing costs unless the supply of affordable housing is increased in the future.

As stated earlier, this Regional Housing Needs Assessment fulfills the requirements of NHRSA §36:47, which states that “For the purpose of assisting municipalities in complying with RSA §674:2, III(m), each regional planning commission shall compile a regional housing needs assessment, which shall include an assessment of the regional need for housing for persons and families of all levels of income.”

The next step for the RPC is to utilize the regional data to create a regional housing profile, which individual communities can then use to identify the greatest need for future housing at a local level.

The remaining sections of this Housing Chapter discuss barriers that limit necessary housing development in the region, and regulatory changes and non-regulatory policies and efforts that need to be undertaken in order to overcome these barriers.