



September 2, 2010

To: Mike McGovern, Cape Elizabeth Town Manager
From: Frank O'Hara
Re: Review of Comprehensive Plan Growth projections

Introduction

Planning Decisions has been hired to review the population and household projections contained in the 2007 Cape Elizabeth Comprehensive Plan. This memo addresses the issue by responding to the following questions:

- 1) What is the use of projections?
- 2) Were Cape Elizabeth's housing projections reasonable when they were done?
- 3) Given the recent and dramatic changes in the housing market, are they still reasonable?
- 4) What would a new projection for Cape Elizabeth look like?

1) What is the use of projections?

By way of background, it is useful to have a perspective on the function of population and housing projections. Projections are not "predictions." No one can predict the future. Projections are a way of taking certain explicit assumptions about births and migration and aging and housing preferences, and of "playing through" these assumptions over time. Projections are useful to the extent that they can help the policymaker anticipate certain issues that may arise in the future from, say, the aging of the baby boom.

Nor are projections statements of "policy" or the "preferred future." They are statements about what might be likely under a certain set of assumptions. Policy development is a subsequent step. The higher the quality of the projections, obviously, the better-informed the policy-maker can be.

2) Were Cape Elizabeth's housing projections reasonable in 2007?

The *population* projections in the Plan are based upon those the projections developed by the Maine State Planning Office (SPO) in 2002 (page 6). Those projections used the 2000 Census as a baseline, and were based upon a "share" methodology. They create a future county population growth scenario based on recent trends, and then apply a share of the growth to individual cities and towns.

The *household* projections in the Plan were developed by Greater Portland Council of Governments (GPCOG). They are based upon the State Planning Office projections referred to above, along with assumptions about household size and group housing residency (pages 34 and 35).

GPCOG staff then turned the household projections into projections for future year-round *housing growth* in the Town, using assumptions about vacancies and housing type. This exercise resulted in a projection of an increase of year-round housing units from 3,724 in 2000 to 4,008 in 2020, an increase of 284 units, or about 14 units a year.

A second set of housing projections was developed by the Cape Elizabeth planning staff as part of the land use section in the back of the Plan. These projections started with recent history – how many year-round housing units per year had been built in Cape Elizabeth from 1990 through 2006. The next question was how much developable land is available to accommodate residential growth. The conclusion of the exercise was that the Town could physically accommodate 1,300 additional units under current zoning, and that 330 units might be expected if the 1998 to 2006 rate of construction continued into the future at a slightly reduced rate (see page 147).

There were occasional trivial mistakes in the data. Owner-occupied units in 2020 are listed in the Plan as 3,469 (page 35), but the context suggests that the number should have been 3,492. The historic rate of growth from 1998 to 2006 is listed as 24.6, but actually calculates to 24.7 (page 147).

A larger issue is that the Plan ends up providing two projections of housing growth: one projection in the demographics chapter of 14 units per year from 2000 to 2020 (page 35), and another of about 24 units per year from 2007 to 2020 in the land use chapter (page 147).

While the document does not explain why there are two different housing projections, from a practical point of view, it makes little difference. If the Town develops at 24 units a year, it reaches 240 new units in ten years. If the Town develops at a pace of 14 units per year, it reaches

240 new units in 17 years. In either case, the question of where the units should go remains to be addressed – no matter whether the units come over 10 years or 17 years.

From a professional point of view, the methodologies used to come up with the projections – the State Planning Office/GPCOG population and household projections, and the Town historic land use projections – are both respectable approaches used by many cities and towns in Maine.

Table 1: Housing Projections, 2007 Cape Elizabeth Comprehensive Plan

PAGE	SOURCES (if not Census)	TOPIC	2000	2006	2020	Per year (00-20)
6	SPO -- 2010-20	Total Population	9,068		10,011	47.2
34-5	COG (constant % of Town)	Group quarters	101		112	0.6
		Population in housing	8,967		9,899	46.6
	COG (2%, based on census projections)	Household size	2.57		2.51	0.0
		Households	3,680		3,948	13.4
		Vacant housing units	44		59	0.8
	COG (1% owner, 5% renter)	Vacancy rate	1.2%		1.5%	0.0
		Total housing units	3,724		4,008	14.2
147	Cape Elizabeth records	Permits 00-06		183		26.1
	Cape Elizabeth records	built 90-06		448		26.4
	Cape Elizabeth records	Permits 98-06		222		24.7
	Town planner, based on history, land available	projected 07-17		264		24.0
	“ “	projected 18-20		66		22.0
	“ “	Projected 07-20		330		23.6

3) Given the recent and dramatic changes in the housing market, are they still reasonable?

The fact that the Comprehensive Plan projections were reasonable in 2007 does not necessarily imply that they are still useful. Much has changed in the last three years as a result of the recession. Because we are still in the middle of a period of uncertainty, projections must be considered an even more tentative way than usual. But there are a few things that can be noted.

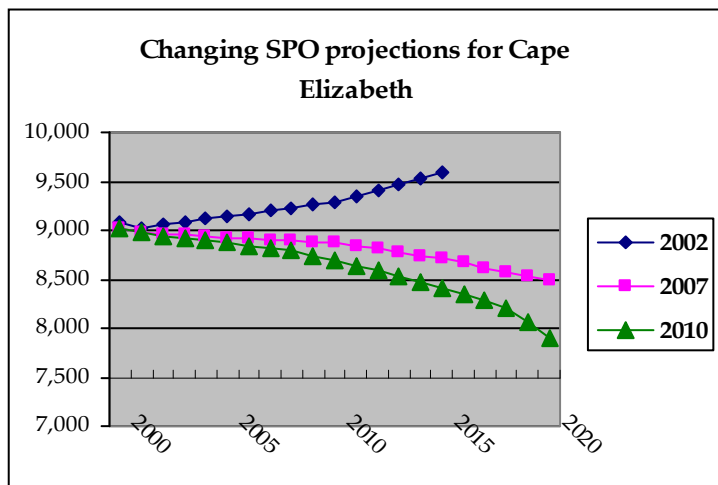
- A. Actual housing permits from 2007 through 2009 in Cape Elizabeth averaged 13 units per year (source: US Census). This is slightly below the GPCOG estimates. Of course, these numbers occurred during the worst housing recession in recent history, so they cannot be considered to be typical of what can be expected over the longer term.

B. The population of Cape Elizabeth has declined since 2000, rather than increasing as the Plan projected. The Maine SPO projected that Cape Elizabeth’s population would grow by nearly 600 people between 2000 and 2010 (from 9,068 to 9,627 – see page 6 of the Plan). In fact, Cape’s population has declined during the decade, and is likely to end up around 300 people fewer than in 2000 by the time the 2010 Census figures come out.

Table 2: Population Estimates, U.S. Census

	Census	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Cape Elizabeth	9,068	9,016	9,012	8,973	8,976	8,996	8,879	8,804	8,795	8,784	8,806
Cumberland County	265,612	265,611	266,058	268,021	269,830	272,039	274,344	274,695	276,073	277,512	278,559
% of County	3.4%	3.4%	3.4%	3.3%	3.3%	3.3%	3.2%	3.2%	3.2%	3.2%	3.2%

C. The SPO has revised its projections of future Cape Elizabeth growth since the Plan was published. The Plan relied on State Planning Office population projections made in 2002. Since then, the SPO has revised its projections twice, most recently in 2010. A comparison of the three Cape Elizabeth forecasts shows that with each new forecast, the total population is lowered. The 2002 forecast projected a growth of 500 persons between 2000 and 2015. The 2007 revision projected a decline of 300 people. The 2010 revision (still in draft) projects a decline of 600 --- from about 9,000 in 2000 to about 8,400 in 2015 (and 7,400 in 2023).



There are two reasons for the decline in the projection for Cape Elizabeth:

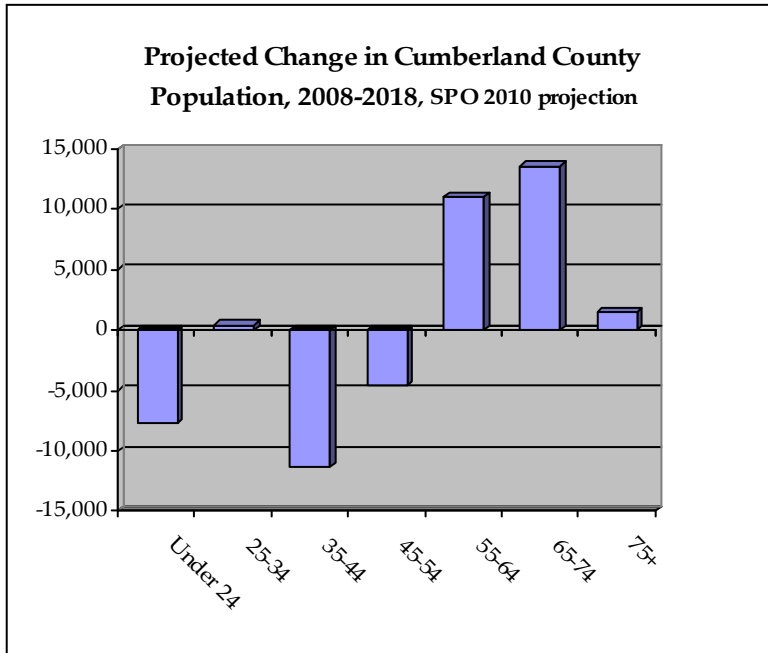
- The total projection for population growth in Cumberland County has been reduced in more than half – from 30,000 to 12,000 in the 2000-2015 period; and
- Cape Elizabeth’s share of the County population is projected to decline from 3.4% in 2000 to 3.0% in 2015 and 2.8% in 2023 (in the earlier projections there was also a decline, but to 3.2% in 2015).

Both of these new assumptions represent recent trends in the area. These projections are still in draft, and will not be published officially until 2011, and the State Planning Office has a chance to reconcile the numbers with 2010 Census counts. I believe these

numbers are too pessimistic for Cape Elizabeth, but even if they are moderated, they still forecast a no-growth scenario.

However, it must also be kept in mind that population growth is not the only contributor to housing demand.

A. The changing age profile of the area population will contribute to internal demand for housing.



The 2010 SPO projections only project a growth of 2,734 people in Cumberland County between 2008 and 2018 – almost a no-growth scenario. Yet within this scenario, the SPO projects an increase of 25,000 people in the 55 to 74 age group. These are households who will be looking to downsize their housing, perhaps living in one-floor arrangements, with condominium-style maintenance help. There is not enough such housing in the region now. There will be a demand for much more.

B. Higher gas prices may contribute to more housing demand in the inner suburbs, rather than in the outskirts.

Cape Elizabeth's share of the County population has not been a constant over the years. During the 1970s and 1980s, when there was more concern about gas prices, Cape's proportion of the County population was close to 4%. Of course, the availability and cost of land, the quality of schools, and many other factors are contribute to housing demand. Looking ahead, if the price of gas takes another jump in the next 5-10 years, it is possible that the Cape and other inner suburbs may experience increased demand.

C. Cape Elizabeth's housing is aging, and there will be demand for replacement stock.

Two-thirds of Cape's housing was built prior to 1950. As energy efficiency requirements increase, as the population ages, there will be a need for new housing more appropriate to 21st century lifestyles.

Table 3: Age of housing in Cape Elizabeth

2000 Census		
Total:	3,724	
Built 1960 to 1969	635	17.1%
Built 1950 to 1959	455	12.2%
Built 1940 to 1949	493	13.2%
Built 1939 or earlier	733	19.7%

To summarize these points:

- Population growth and housing construction have slowed in the last four years.
- Future in-migration and population growth will likely be lower than anticipated in the Cape Elizabeth projections from 2007.
- The major source of new demand for housing is likely to be from internal sources: the aging of the existing population, energy costs, and new lifestyle preferences.

4) What would a new projection for Cape Elizabeth look like?

Taking all of this information together, what would a new projection of housing demand in Cape Elizabeth look like?

On the next page is a projection based upon the following assumptions:

- The 2009 Census population estimate is used as a base
- The State Planning Office projected rate of population change for the County is the rate of growth
- Cape is assumed to retain its share of County population that it has today (3.16%). This is different than the SPO methodology, which assumes a continuing movement to outer communities in the next 10 years. If SPO is right, Cape will have a housing vacancy rate of nearly 10% in the coming years. I don't think that will happen, so am holding Cape's share constant.
- Institutional housing is projected to grow by 10 people a year, as the population ages
- Household size is projected to decline at the rate projected by the US Census (0.2%/year)
- An overall vacancy rate of 2.5% is assumed necessary for a healthy housing market
- A replacement need of 0.13% per year is assumed to replace housing lost to fire, demolition, etc. (this was Cape's rate in the 1990s, according to Census data)
- The sum of households, vacancy need, and replacement need, is total housing demand

The result of this exercise is a projection of virtually no housing growth – 38 new units in 11 years, or an average of about 3 or 4 a year.

Again, the projection does not take into account “internal demand” from existing households who wish to change their housing. As the baby boom ages, households will be looking to move from large houses on large lots for smaller, one-story, low-maintenance, energy-efficient homes. From a net demand point of view, this is a zero change -- an existing household moving out of one home into another. But from the point of view of a planning board, particularly in a desirable community like Cape Elizabeth, this movement may generate significant new development proposals.

Table 4: Housing Demand Projection, Cape Elizabeth

	A	B	C	D	E	F	G	H	I
	Total population	In institutions	In housing	HH size	Households	Vacancy need	Replacement need	Total housing demand	Annual change
	Census 2009 3.16% of County (SPO projection)	Plus 10 Per year	A-B	Cape 2000 rate Decline at national rate	C/D	E*2.5%	F*0.13%	E+F+G	Change In H
2009	8,806	100	8,706	2.51	3,469	87	5	3,560	
2010	8,820	110	8,710	2.50	3,477	87	5	3,569	9
2011	8,835	120	8,715	2.50	3,486	87	5	3,578	9
2012	8,849	130	8,719	2.49	3,495	87	5	3,587	9
2013	8,864	140	8,724	2.49	3,504	88	5	3,596	9
2014	8,867	150	8,717	2.49	3,508	88	5	3,600	4
2015	8,870	160	8,710	2.48	3,512	88	5	3,604	4
2016	8,873	170	8,703	2.48	3,516	88	5	3,609	4
2017	8,876	180	8,696	2.47	3,520	88	5	3,613	4
2018	8,879	190	8,689	2.47	3,525	88	5	3,617	4
2019	8,848	200	8,648	2.46	3,515	88	5	3,608	-10
2020	8,818	210	8,608	2.46	3,506	88	5	3,598	-10