

3.0 GROWTH PROJECTIONS

This Chapter presents past and future forecasted growth (to the year 2035) in population, jobs and new dwelling units in the region. These are presented to provide a baseline for analyzing the effects of this future forecasted growth on land use and on the existing Study Area transportation system.

All of the forecasted growth in population, jobs and new dwelling units for the year 2035 was developed by Professor Charles Colgan, PhD of the University Of Southern Maine, Muskie School of Public Service.

The Study Area is within Maine’s largest metropolitan area. By definition, a metropolitan area is anchored by one or more communities with 50,000 or more population and includes the surrounding communities that are economically and socially tied to the core communities, as measured by community patterns.

For the last century, the overall pattern of settlement in the U.S., including Maine, has been described as a two-part “centralization-decentralization.” That is, there has been a continuous migration of population into metropolitan areas (*centralization*) as people leave job-depleted rural regions and move to metro areas where there are more economic opportunities. And then, within metropolitan areas, there has been a migration outward from the core communities into the suburbs and exurbs, typically within 30 to 45 minutes of the job centers (*decentralization*).

Both parts of the pattern are important to the Study. The *centralization* of Maine’s population into metropolitan areas would continue to help drive economic and population growth in southern Maine. The amount of ongoing *decentralization* to the suburban and rural territories around the core communities would continue to shape transportation and other demands on the region and its communities.

The rapid geographical expansion of the Portland metropolitan area (now known as the municipally-based Portland-South Portland-Biddeford NECTA¹⁸) illustrates the decentralization of growth that has dominated the region for the last several decades. In 1970, the Portland metropolitan area consisted of 9 communities (Portland, South Portland, Westbrook, Falmouth, Cape Elizabeth, Cumberland, Yarmouth, Gorham, and Scarborough). By 1990, the boundaries

¹⁸ Until the 2000 decennial census, the building blocks of metropolitan areas in New England were municipalities. In 2000 the Federal government switched New England’s definition to the one that has long been used in the rest of the country, based on counties. Thus, the Portland-South Portland-Biddeford Metropolitan Area now formally consists of all of York, Cumberland, and Sagadahoc Counties. But in recognition of the historically important role of towns and cities in New England, the Federal government also continues to recognize so-called “New England City and Town Areas” (NECTAs), which are surrogates for the old municipally-based metropolitan areas. This allows us to continue to track metropolitan patterns of development at the municipal level. For ease of reference, the Portland Metropolitan Area or the Portland-South Portland-Biddeford Metropolitan Area (which from 2000 forward are used interchangeably), mean the Portland-South Portland-Biddeford NECTA –not the 3 county metro area.

encompassed 18 communities in Cumberland County and four in York County. And the 2000 Census showed Cumberland County and northern York County to be economically fused, and the metro area was expanded to 41 municipalities, including 23 in Cumberland County, 16 in York County, and two in Oxford County.

This vast outward expansion of metropolitan boundaries is the hallmark of the pattern that between 1970 and 2000 came to be known as “sprawl”. During this period, within the Cumberland County portion of the metro area, 29 percent of all new housing units were built in the cities of Portland, South Portland, and Westbrook; 45 percent in the suburbs of Cape Elizabeth, Cumberland, Falmouth, Freeport, Gorham, Scarborough, Windham, and Yarmouth; and 26 percent in the next tier of suburban and exurban towns in the metro area (Baldwin, Casco, Gray, Naples, North Yarmouth, Pownal, Raymond, and Standish).

Within the metropolitan area, the portion that is “urbanized” also has spread. “Urbanized” means an area that is settled at 1000 of more people per square mile plus an adjacent area settled at 500 of more people per square mile¹⁹. As of the 2000 Census, the Portland urbanized area consisted of portions of 15 cities and towns (Portland, South Portland, Westbrook, Cape Elizabeth, Biddeford, Cumberland, Falmouth, Freeport, Gorham, North Yarmouth, Old Orchard Beach, Saco, Scarborough, Windham, and Yarmouth).²⁰ This urbanized area had a population of 188,088, or 56 percent of the Portland-South Portland-Biddeford metro area’s total population of 333,624. Conversely, 44 percent of the metro population – more than 145,000 – lived outside of the urbanized area.

Through the first half of the 20th Century, the metropolitan region was anchored by the central city of Portland, with smaller downtowns or village centers in many surrounding communities. Fairly compact neighborhoods – typically about 0.5-mile in diameter – were clustered near transportation facilities (ports, trolley lines, intersections of major roads) or near factories, such as textile and paper mills. A majority of the population lived close to a range of everyday goods and services within the community they lived. Rural lands were largely intact. Downtown Portland served as the regional retail and distribution hub, while smaller downtowns or neighborhood centers in most communities served everyday needs. Workers were split between those who worked in manufacturing, agricultural, and other jobs in the same community where they lived and those who commuted into the central business district of Portland by trolley, bus or auto.

¹⁹ 500 people or even a 1000 people per square mile is not truly “urban”. 1000 people per square mile is only about 1.5 people per acre and 500 people per square mile is just 0.78 people per acre – or about one home per two acres. The U.S. Census uses this as a catch-all term for truly urban communities, such as Biddeford, Saco, Old Orchard Beach, and Gorham; and all or parts of other suburban towns, such as Scarborough and Falmouth, where residential settlement has advanced to these density thresholds. Any area within a metropolitan area or NECTA that is not urbanized is considered by the Census to be “rural” – although, again, some of the “rural” areas would be more accurately described as suburbs. Development in these areas is just more spread out, without an identifiable “place,” than the suburban areas that are included in the definition of “urbanized.”

²⁰ This urbanized area is used, for example, to define the jurisdiction of PACTS and the area within which certain EPA/DEP storm water management rules apply.

For a variety of reasons, this pattern faded in the second half of the century. Traditional industries closed their doors; the economy shifted toward service production and national and global markets; incomes rose; and the rising value of urban real estate, improved roads, auto-oriented shopping centers, and two-car families worked to push and pull development to a widening circle of rural lands. Automobile travel, already prevalent by the 1950s, became dominant. Bus service and ridership dropped precipitously.

The result is a spread-out pattern of settlement that depends less on either the core communities or traditional village centers for goods and services. Downtown Portland and other centers remain as identifiable places but had to adapt to the rising retail dominance of suburban and highway-oriented shopping centers. Beginning in the 1970's, zoning ordinances codified and helped perpetuate this spread-out pattern, often doubling and tripling minimum lot size requirements for residential development. More recently, some communities have amended their ordinances to allow higher densities of residential development in specific districts, but it is unlikely that these changes – without a companion requirement to discourage development in rural districts – would alter patterns of settlement within communities.

Commercial development outside of major downtowns has been of similar low intensity, usually at floor area ratios (FAR) of under 0.2 – meaning that for a typical suburban commercial development, the lot on which the development occurs has five times more land area than total building floor area (typically used for parking). The regional Maine Mall area has an FAR of 0.23. In contrast, the pattern in small town downtowns tends to be in the 0.6 to 0.8 range, which is three to four times more intense than typical strip shopping centers; in downtown Portland, the overall average is about 2.3 – ten times more intense than the Maine Mall area. The low-intensity of suburban commercial centers has helped spread out development and increase auto dependency.

The process of spreading out has created, in many large metropolitan areas, a new type of low-density job and mixed-use center. This has been dubbed “Edge City,”²¹ because it has many of the land uses found in a downtown – retailers, offices, recreational facilities, homes, civic buildings – but downtowns and edge cities otherwise bear little resemblance to each other. Downtown activities are tied together by sidewalks and short blocks, while in the Edge City they are tied together by freeways; and downtowns tend to be a half-mile to a mile in diameter with recognizable boundaries, while the Edge City is several miles end to end – and the “end” may not be a recognizable boundary. Generally, Edge Cities are auto-dependent and not pedestrian-friendly. In the Greater Portland region, the Maine Mall – Payne Road area is approaching “Edge City” proportions.

Nationally and in Maine there is a broad discussion about the most efficient and sustainable metropolitan form of growth and development. As briefly summarized above, the Portland

²¹ The popular book on this topic is *Edge City* by Joel Garreau (1991)

metropolitan area has evolved from a form characterized by a large regional center (focused on the Portland peninsula) with multiple smaller, compact centers serving neighborhoods and individual communities, to a spread-out form characterized by the out-migration of population, low density suburban residential development, and highway-oriented commercial development at low floor area ratios.

Because the regional form of growth and development has direct impact on transportation demands, traffic safety and quality of life measures, the Study tested and compared the differences between the now “Low Density Form” or “sprawl” pattern extrapolated to 2035 and an alternative pattern of growth and development identified as the “Urban and Rural Form” (described in Chapter 4). The Study identified three regional patterns of development and divided the Study Area communities as follows (**bold** face communities represent the four core communities in the Study Area):

- Urban Communities: Portland, **South Portland, Westbrook.**
- Inner Suburbs: Cape Elizabeth, Cumberland, Falmouth, Freeport, **Gorham, Scarborough,** Windham, Yarmouth.
- Outer Suburbs: Buxton, Gray, Hollis, New Gloucester, North Yarmouth, Pownal, Raymond, Standish, plus the rural southwestern portion of Brunswick.
- Rest of PACTS Model Area: Arundel, Biddeford, Dayton, Durham, Kennebunkport, Lyman, Old Orchard Beach (OOB), Saco.

For context, the total number of new jobs projected for the Urban Communities, Inner Suburbs and Outer Suburbs identified above from 2009 to 2035 is about 25,000; and of new dwelling units, just under 35,000. Tables 3-1 through 3-3 provide job, population, and housing (also identified as dwelling units (DU)) growth numbers that were used to evaluate both scenarios.

Table 3-1
Distribution of Job Growth

	Targeted shares of regional Job Growth		
	Urban Communities	Inner Suburbs	Outer Suburbs
Share and (total) as of 2009	65%± (103,600)	29%± (45,500)	6%± (9,600)
2009-2035 projected share of growth, Low Density Form (Sprawl)	66%± (+16,500)	30%± (+7,400)	4%± (+1,000)
2009-2035 projected share of growth, Urban and Rural Form	65%± (+16,200)	30%± (+7,400)	5%± (+1,300)

Table 3-1 indicates that the urban communities would continue to be the regional employment center with 2/3 of all new jobs occurring in the three urban communities.

Table 3-2
Distribution of Population Growth

	Targeted shares of regional Population Growth		
	Urban Communities	Inner Suburbs	Outer Suburbs
Share and (total) as of 2009	42%± (99,800)	38%± (91,700)	20%± (46,700)
2009-2035 projected share of growth, Low Density Form (Sprawl)	5%± (+3,500)	61%± (+39,400)	34%± (+21,600)
2009-2035 projected share of growth, Urban and Rural Form	34%± (+21,900)	49%± (+31,800)	17%± (+10,800)

Table 3-2 indicates that under the low density form, outmigration from the urban communities would continue increasing the numbers of commuters from the inner and outer suburbs to the job centers in the urban communities.

Table 3-3
Distribution of Dwelling Unit Growth

	Targeted shares of regional DU Growth		
	Urban Communities	Inner Suburbs	Outer Suburbs
1970-2000 share of DU growth ¹	29%	45%	26%
2000-2009 est. share of DU growth ²	21%	50%	29%
2009 estimated total DUs	45%± (51,200)	36%± (40,700)	19%± (21,100)
2009-2035 projected share of growth, Low Density Form (Sprawl)	9.5%± (+3,300)	52%± (+18,200)	38.5%± (+13,400)
2009-2035 projected share of growth, Urban and Rural Form	35%± (+12,200)	45%± (+15,700)	20%± (+7,000)

1. This row indicates that from 1970 to 2000, 45% of all new dwelling units in the Study Area were built in the inner suburbs.

2. This row indicates that from 2000 to 2009, 50% of all new dwelling units in the Study Area were built in the inner suburbs.

Table 3-3 predicts a continued considerable decline in the overall number of new residential dwelling units that would be constructed in the urban communities in the next 25 years (only 9.5 percent) if development continues to occur in an unconstrained manner.