5.0 ALTERNATIVE LAND USE SCENARIO

This Chapter presents methodology for identifying an alternative land use scenario and the measures that were developed for comparing the "Low Density Form" of development versus the recommended alternative land use scenario indentified as the "Urban and Rural Form" of development.

To identify an acceptable alternative land use scenario, two land use workshops with representatives from the Study Area communities were held to brainstorm innovative development concepts for managing the region's future land use development. Besides the traditional growth model, identified as the "Low Density Form", four other development forms were described at the first workshop. They were:

- The Modified Low Density Form;
- The Urban Preservation Form;
- The Community Centered Corridor Form; and
- The Transit-Oriented Corridor Form

The following provides the characteristics of each of the five forms that were considered by the workshop attendees at the first workshop. It then describes the Urban and Rural Form, a hybrid that emerged from the workshops.

5.1 Low Density Form

The "Low Density Form" describes the existing pattern of development that is a pattern of decentralization of population and jobs from the core of the metropolitan area to suburbs and exurbs, causing metropolitan boundaries to expand. The decentralization occurs at low residential densities of development and low commercial intensities, relying on the automobile as a virtually exclusive means to reach needed destinations, whether for work, shopping, services, or recreation, and as a supplement to school busing.

"Low Density" is defined as residential development at less than two units per acre, and frequently at less than one or even 0.5 unit per acre; employment related-development at less than 10 jobs per acre; and commercial development at less than a floor area ratio of 0.3.

Within this pattern, central cities continue to lose population but retain their roles as fairly intense financial, educational, cultural, and business service centers. Communities that arose independently of the central cities, based on their own industrial bases – Westbrook, Yarmouth, and Freeport, for example – continue to have their own smaller centers, even as they have been absorbed into the larger metropolitan region. But retail and office development continues to migrate outward to highway-oriented locations. The populations of suburban and exurban towns within the metropolitan area grow at significant rates while the populations of core communities

are flat to declining. Within the respective municipal boundaries of the growing suburbs, rural and other low density residential zones receive 60 percent+ of new residential development, while residential development within locally designated "growth" areas account for less than 40 percent of growth.

In this Low Density form, as of 2008 only about 20 percent of jobs within the Study Area were located in districts (as defined by transportation analysis zones, or TAZs) with 25 or more jobs per acre – the minimum frequently cited as necessary to support a moderate level of bus service -- and virtually all of these districts are located in the central city of Portland. The distribution of jobs[24] in the Low Density pattern as of 2008 is:

- fourteen percent at 50+ jobs/acres, all in Portland and most on Portland's peninsula;
- five percent at 25 to 49 jobs/acre, nearly all in Portland, plus one TAZ in downtown Biddeford;
- fifteen percent at 10 to 24.9 jobs/acre, including several TAZs in the Maine Mall area;
- fourteen percent at five to 9.9 jobs/acre; and
- fifty-two percent at under five jobs/acre.

In this Low Density form, three-quarters of residences are settled at densities of under two DU per acre. Only about 14 percent of DU are in TAZs with residential densities of seven or more DU per acre, the minimum frequently cited as necessary to support bus service on a 30-minute schedule. The distribution of DU[25] (per gross acre) is:

- six percent at 15+ DU/acre, virtually all in Portland plus a few TAZs in Biddeford and Saco;
- eight percent at seven to 14.9 DU/acre, in Portland, Biddeford, Saco, South Portland, and OOB;
- eleven percent at four to 6.9 DU/acre, in the above communities plus Westbrook;
- thirteen percent at two to 3.9 DU/acre, including some TAZs in Cape Elizabeth, Scarborough, and Gorham; and
- sixty-two percent at fewer than two DU/acre.

A number of competing forces would continue to push growth outward, but others on the horizon may slow the trend. For example, an aging population, energy costs, and the needs of a knowledge-based economy (in which "knowledge" workers tend to favor energetic urban settings and combined live/work environments) may nudge the pattern of growth toward the

[24] The calculations of jobs/acre are based on TAZs. TAZs are not of uniform size: in in-town areas they contain relatively few acres, while in outlying areas they tend to be large. This approach may understate the densities in some of the outlying areas.

[25] The calculations of dwelling units/acre are based on TAZs. TAZs are not of uniform size: in in-town areas they contain relatively few acres, while in outlying areas they tend to be large. This approach may understate the densities in some of the outlying areas. TAZs drawn differently in some communities might show higher densities over small areas. Densities are based on gross acres; net residential densities would be higher.

urban centers. On the other hand, technology, the lower costs of "Greenfield" development[26], and the search for affordable land would continue to push growth to the exurbs.

5.2 Modified Low Density Form

The Modified Low Density Form refers to a form that includes pockets of compact nodes that develop as a result of zoning that allows innovative, more compact development within local growth areas. These nodes can be primarily single use (residential or commercial) or mixed use and can be new or existing nodes in which infill opportunities are encouraged and exploited, but the amount of growth in them represents a small share of total growth in a community or the region. While zoning is innovative in these nodes, allowing residential densities of at least four to six DU per residential acre where public utilities are available and at least one to two DU per acre otherwise, zoning in other portions of locally designated growth areas remains distinctly suburban in form (moderate to low densities of residential development, primarily single-purpose zoning districts, modest or no interconnections between new development and the rest of the circulation system); and zoning in rural districts continues to encourage low-density rural residential development. Representative of the Modified Low Density Form are recent zoning reforms in Scarborough (town and village center and traditional neighborhood development zoning districts) and Gorham (density transfer overlay district).

Regionally, the growth trend is the same as the Low Density Form – *i.e.*, continued out-migration of retail and office development and residential development. Within communities, development in compact nodes along with demographic trends that may favor such development has some effect on shares of development within locally designated growth areas, but a majority of both residential and commercial growth follows the Low Density Form in location and design. The Modified Low Density Form could include expanded performance standards to relieve certain effects of the low density pattern, especially to manage access onto and off arterials and major collectors and to reduce the visual impacts of linear, highway-oriented development.

5.3 Urban Preservation Form

The Urban Preservation Form enables the urban communities, such as Portland, South Portland, and Westbrook to retain their current (2008) shares of jobs, population, and housing units in the metro area. By retaining their shares, their numbers of jobs, households, and population would grow in the same proportion as county or metropolitan-wide growth, reversing a decades-old trend. In this form, the core urban communities would claim a higher percentage of growth than in previous decades. Other communities in the region also would retain their shares, but this would represent a slowing of their growth compared with recent decades when they have been gaining shares.

[26] Greenfield development is the creation of planned communities on previously undeveloped land.

Within the core urban communities, growth of both jobs and housing would be focused in areas that have the best chance of achieving the density, diversity, and design of development that are friendly to multiple modes of travel. These thresholds include 50 jobs per acre, six to 12 DU per residential acre, or a combination of jobs and DU per acre determined to be supportive of multiple modes; a jobs per housing ratio in the range of 1.3 to 1.5 either within specified neighborhoods or in neighborhood and employment centers that are closely linked in transportation corridors; sufficient mixes of compatible land uses to allow a reasonable internal capture of trips; and land use that facilitates multiple modes of travel within and between neighborhoods.

Within communities outside of the core urban cities, the pattern of new development follows the Modified Low Density Form described above.

5.4 Community-Centered Corridor Form

The Community-Centered Corridor Form consciously directs most new commercial growth and a share of new residential growth into planned centers or nodes (existing and new) that are interspersed along or near transportation corridors. The planned centers include existing centers, with careful thought to increasing infill opportunities; some represent a continued evolution of places like the Maine Mall area; many grow out of emerging centers, with careful thought to how to design these centers; or they are entirely new centers. A given center may be primarily commercial, primarily residential, or a mix, but together, these centers would achieve a jobs per housing ratio in the range of 1.3 to 1.5. A high percentage of new jobs projected for the region – 80 percent or more – and a significant share of new housing units – a third to 40 percent -- locate in these centers.

The centers would be located in each of the Study Area communities, and each community is likely to have multiple nodes. In this form, growth of suburban communities likely continues to outpace the core cities, but the cities do grow, and the growth in all communities is organized differently than under the Low Density or Modified Low Density Forms. Compactness, densities and intensities of development in the urban centers increase as the corridor moves from outlying communities toward the center of the region, and from areas with limited public sewer and water lines to areas where these facilities are readily available.

But all communities grow in closer alignment with transportation-land use best practices (with respect to land use, jobs-housing balance, density, and accessibility). The result is a continuum of hamlets, small downtowns and nearby neighborhoods, larger and more urban centers, and the most intense urban center on Portland's peninsula. The overall pattern of urban centers is similar to that envisioned by the PACTS Land Use Planning Guidelines published in 2005 (*PACTS Transportation Project Land Use Policy: Implementation Guidelines).* These guidelines refer to "compact planning areas". Rural residential development still would be considerable but would

not make up more than 25 to 30 percent of new housing units regionally. Blocks of unfragmented rural lands would separate many of the community-oriented centers.

5.5 Transit-Oriented Corridor Form

The Transit-Oriented Corridor form combines a more intense version of the Urban Preservation Form and a more intense version of the Community Centered Corridor Form. It envisions a smaller number of larger centers than in the Community Centered Corridor Form. The centers build around the concept of Transit-Oriented Development (TOD) and include both urban (denser) TODs and neighborhood or town-scale TODs. These centers are located where public sewer and water are available and include a combination of existing centers that already function like a TOD or have infill opportunities, the conversion or continued evolution of suburban centers like the Maine Mall area and the Route 22-Spring Street area into TODs, emerging centers that can be shaped into TODs, and new, planned TODs.

Urban TODs strive for 50+ employees per acre, and job-generating land uses occupy a majority of the development. However, residential, public, and open space uses also are prominent, with residential uses at a density of 10 to 25 DU per acre. Neighborhood TODs are primarily residential, which account for upward of 70 to 80 percent of the development, including open space amenities, but they also include some non-residential and public land uses. Depending on location, residential uses are at a density of five to 15 DU per acre, and compatible job-generating land uses are upwards of 25 employees per acre.

The TODs account for a large share of both employment and housing growth in the region, with no more than 25 percent of either occurring outside of areas designated for transit-oriented development. The TODs are specifically designed to enable and to take advantage of transit opportunities.

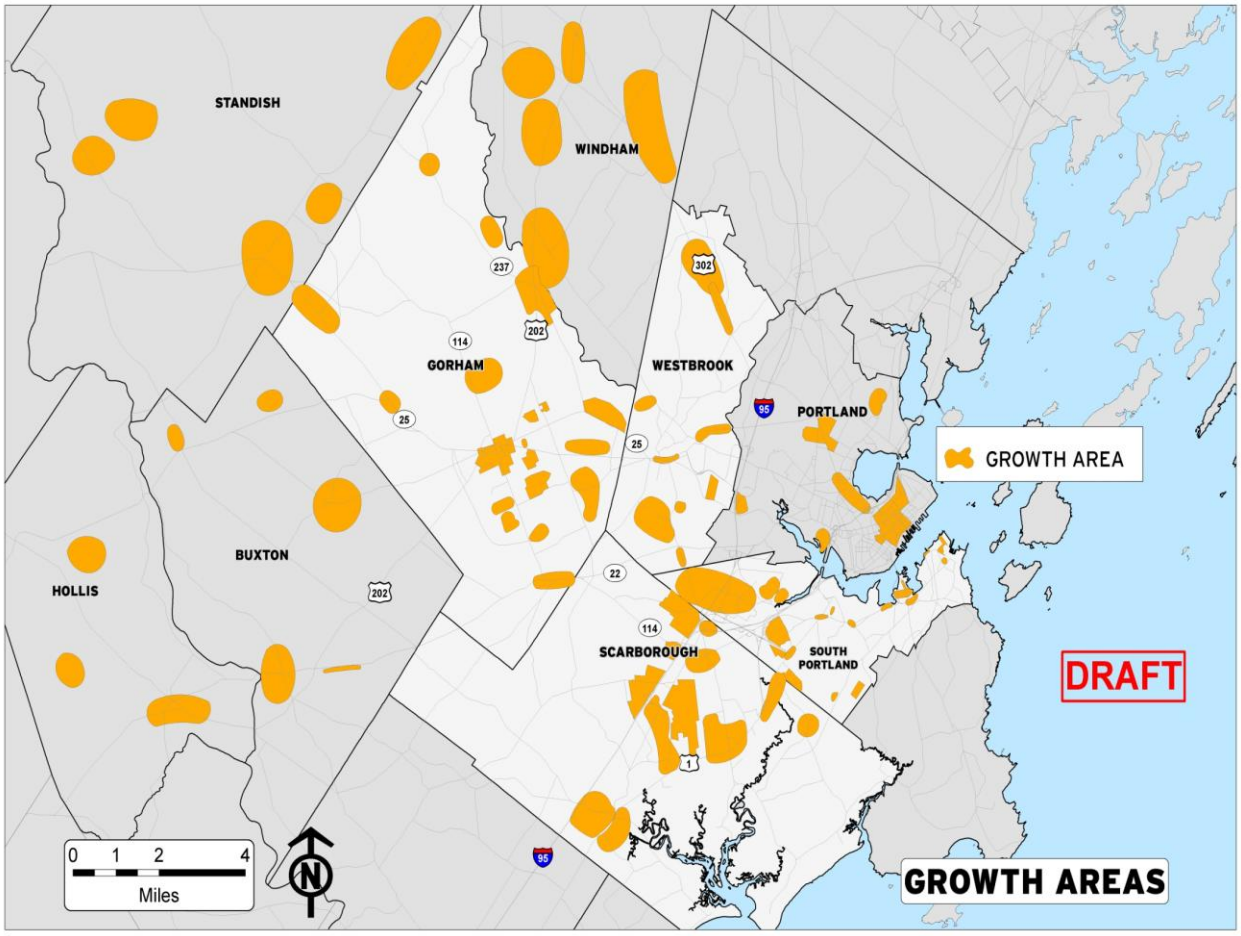
Second Land-Use Workshop: Taking input provided at the first land-use workshop, the Study Team developed a hybrid land-use form that was presented and refined at the second land-use workshop. This hybrid form described below is the recommended land use form used for testing transit (Chapter 6) and roadway (Chapter 7) opportunities for addressing the region's future growth.

5.6 Urban and Rural Form

The Urban and Rural Form (Figure 5-1) combines characteristics from the Urban Preservation, Community-Centered Corridor and Transit-Oriented Corridor (TOC) forms described above. As in the Urban Preservation Form, the core urban communities of Portland, South Portland and Westbrook retain their high shares of regional employment and reverse a long-term trend toward loss shares of the region's population and housing units. This reversal of declining shares of growth in urban communities would be supported by older and younger segments of the

population who are interested in moving into more walkable, urban environments with low transportation costs, reliable transportation service and job proximity. It would also take some of the housing pressure off the fast-growing inner suburbs. But as in the TOC form, the inner suburban communities also retain a significant proportion of jobs, population and housing units, much of which would be organized into dense TOC-like nodes and/or town centers that include open space and public land use. These TOCs exist with the specific goal of enabling and taking

Figure 5-1
Urban and Rural Form Proposed Growth Areas



advantage of transit opportunities over the long term.

Finally, in the more rural outer suburbs, population, housing unit and job growth slows down modestly compared with recent history, but significantly compared with the trend/low density pattern with an emphasis on placing the new residential and commercial development in proximity to each other to reduce the need for long-distance travel. The Urban and Rural land use form identified proposed growth areas that were used as the basis for developing the transit and roadway scenarios for addressing the region's future growth. Each municipality developed

the growth areas shown in Figure 5-1 and these growth areas are subject to change by each community.

Tables 3-1 through 3-3 in the previous chapter provides a comparison of the proposed job, population and dwelling unit distribution for the three regions between the low density form (current growth pattern scenario) and the urban and rural form (alternative land use scenario).