

Buildout Methodology

This section provides a description of the assumptions and methods used to project future population, housing, and employment levels for the City of Ontario. The projections themselves are presented on the Future Buildout Projections table (Exhibit LU-03).

Background and Baseline Assumptions

The Future Buildout Projections are estimates of the future buildout of the Policy Plan in terms of dwelling units, population, non-residential building square footage, and jobs. A key assumption in understanding these projections is that they reflect a theoretical buildout of the entire City, rather than what is likely to appear on the ground on an individual parcel. The land use plan serves as the basis for these projections. In the portions of the city which have an overlay designation of Business Park, Industrial or Commercial but the underlying designation is some other designation, the future buildout assumes the properties will be developed under their overlay designation.

Assumed Density/Intensity: Historically, citywide buildout levels do not achieve the maximum allowable density/intensity on every parcel and are, on average, lower than allowed by the Policy Plan because the development of individual parcels or groups of parcels must account for factors such as physical site constraints, more detailed zoning requirements that further limit development potential, and other regulatory constraints. As such, assumed densities and intensities used to calculate buildout are based on this fact; they represent an average level of density/intensity that will likely be achieved at buildout of each land use category.

Acres: Acres are derived from GIS-based calculations for each land use category. The acres are depicted as adjusted gross acres, meaning that the right-of-way for public roads, railroads, and flood control facilities are not included in each land use designation and instead accounted for separately.

Residential Assumptions

Estimations for the buildout of the residential land use designations were calculated using the following assumptions/methods:

Assumed Density/Intensity: The average number of units that will likely be achieved per acre at buildout of the land use designation.

Units: Dwelling unit projections are estimated by multiplying the Acres of each land use designation by the corresponding Assumed Density/Intensity factor. In the Mixed Use land use designation, the percentage of acres assumed to be devoted to residential uses varies by location and is described separately for each mixed use area on the Future Buildout Projections table.

Persons per Household: This factor is used to estimate population at buildout and is based upon the Development Impact Fee report (link to the DIF) that has been adjusted for the 2000 Census. The persons per household factor varies by:

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- Land Use Designation and Unit Type: lower density land use designations typically accommodate larger units and a greater number of occupants than higher density designations, which typically accommodate smaller units and fewer occupants. The Medium Density land use designation accommodates a mixture of multi-family attached and single-family detached and attached units. It has been assumed that the Mixed-Use land use designation will accommodate fewer occupants per unit because this type of unit typically attracts singles, retirees, and young couples.
- Area: The Old Model Colony (OMC), which was developed earlier, accommodates a different size and type of medium density unit than the New Model Colony (NMC), which was developed later, and the persons per household factor has been adjusted accordingly.

The following persons per household factors were utilized to estimate future population:

Land Use Category	Assumed Unit Type(s) (% of Mixture)	Persons Per Household (area)
Rural, Low Density, and Low-Medium Density	Single-family detached (100% of units)	3.997 (citywide)
Medium Density	Single-family attached (75% of units in OMC)	3.997 (OMC)
	Single-family detached (25% of units in OMC)	3.278 (OMC)
	Multi-family attached (100% of units in NMC)	3.347 (NMC)
High Density	Multi-family attached	3.347 (citywide)
Mixed Use	Multi-family and Single-family attached	2.0 (citywide)
Notes: OMC = Old Model Colony NMC = New Model Colony		

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Population: Population is determined by multiplying the projected number of dwelling units by the persons per household factor.

	Population/Acre
Rural Residential	7.994
Low Density Residential	15.99 OMC 17.99 NMC
Low Medium Density Residential	33.97
Medium Density Residential	68.71 OMC 73.63 NMC
High Density Residential	117.15
Mixed Use	Varies - 2 person/unit

Non-Residential Assumptions

Estimations for the buildout of the Retail/Service and Employment related land use designations were calculated using the following assumptions/methods:

Assumed Density/Intensity: The average Floor Area Ratio (FAR) that will likely be achieved at buildout of the land use designation. In the Mixed Use land use designation, the FAR assumed to be devoted to non-residential uses varies by location and is described for each mixed use area on the Future Buildout Projections table (link to Future Buildout Secondary Page - 01c_BuildoutSecondaryPage.doc).

Floor Area Ratio (FAR): Indicates the total building square footage on a given lot divided by the lot area of the same lot. Building square footage includes all habitable structures on the lot and does not include garages. Click here (link to FAR definition and example page) for an example. In the Mixed Use land use designation, the FAR assumed to be devoted to non-residential uses varies by location and is described in each mixed use area.

Non-Residential Square Footage: Non-residential square footage projections are calculated by multiplying the acres of each non-residential land use designation by the corresponding FAR and by 43,560 (square feet in an acre).

Employees/1000 SF Factor: This factor indicates the number of employees per 1,000 square feet and is used to estimate the number of jobs in each land use category. These factors were derived from the Employment Density Study, Summary Report October 31, 2001, prepared for the Southern California Association of Governments by Natelson and Associates.

The Employees/1000 SF Factor varies by business type with offices accommodating a greater number of employees per square foot than industrial uses. In addition, the Neighborhood Commercial land use category is typically less intensive and accommodates fewer employees per square foot than other retail and service uses. The

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following Employees/1000 SF Factors were utilized to estimate future jobs and are divided into non-mixed use and mixed use land use categories:

Non-Mixed Use Land Use Categories

Land Use Category	Assumed Job Type (% of Mixture)	Employees/1,000 Sq. Ft.	Employees per Acre
Neighborhood General	Non-Office (80%)	2.310	24.15
	Office (20%)	2.860	7.47
General Commercial	Non-Office (90%)	0.718	8.44
	Office (10%)	2.860	3.74
Office/Commercial	Non-Office (30%)	0.718	7.04
	Office (70%)	2.860	65.41
Hospitality	Non-Office (80%)	0.718	25.02
	Office (20%)	2.860	24.92
Business Park	Non-Office (50%)	0.650	5.66
	Office (50%)	2.860	24.92
Industrial	Non-Office (90%)	0.650	14.02
	Office (10%)	2.860	6.85

Mixed Use Land Use Category

Mixed Use Area	Assumed Job Type (% of Mixture)	Employees/1000 SF	Employees per Acre
Downtown	Non-Office (20%)	0.718	5.00
	Office (20%)	2.860	19.33
Euclid/Francis	Non-Office (50%)	2.310	40.25
East Holt	Non-Office (25%)	0.718	7.82
	Office (50%)	2.860	62.29
Meredith	Non-Office (53%)	0.718	6.26
	Office (24%)	2.860	62.29

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Transit Center (Multi-Modal)	Non-Office (45%)	0.718	14.07
	Office (45%)	2.860	56.06
Inland Empire Corridor	Non-Office (20%)	0.718	2.19
	Office (30%)	2.860	18.69
Guasti	Non-Office (30%)	0.718	9.38
	Office (50%)	2.860	43.60
Ontario Center	Non-Office (20%)	0.718	3.13
	Office (50%)	2.860	62.29
Ontario Mills	Non-Office (75%)	0.718	11.73
	Office (20%)	2.860	18.69
SR 60/Hamner	Non-Office (57%)	0.718	5.35
	Office (25%)	2.860	15.57
NMC West	Non-Office (10%)	0.718	2.19
	Office (60%)	2.860	52.32
NMC East	Non-Office (40%)	0.718	3.75
	Office (30%)	2.860	13.08
Note: Mixed use areas assume a mixture of residential and non-residential uses. Accordingly, the total office and non-office percentages will typically not total 100% to account for the areas devoted to residential uses.			

Jobs: On a citywide basis, each land use category produces both office and non-office types of employment, for example, a shopping center may have a market, video rental store, medical office, and realtor office. We have based our estimations for future jobs on this fact and have adjusted our calculations accordingly. Jobs are calculated by dividing the total square footage of both non-office and office job type by 1,000 and multiplying that result by the appropriate Employee/1000 SF factor.

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Synopsis of Future Buildout Assumptions

Designation	Residential Uses	Non-Residential Uses						
	Dwelling Units per Acre	Floor Area Ratio	Office	Commercial	Lodging	Industrial	Mfg.	Warehouse
Rural Residential	2 du/ac	NA						
Low Density Residential	OMC – 4.0 NMC - 4.5	NA						
Low Medium Density Residential	8.5	NA						
Medium Density Residential	OMC - 18 NMC - 22							
High Density Residential	35							
Neighborhood Commercial		0.30	20%	80%				
General Commercial		0.30	10%	90%				
Office-Commercial		0.75	70%	25%	5%			
Hospitality		1.0	20%	30%	50%			
Business Park		0.40	50%			50%		
Industrial		0.55	10%			45%	35%	10%

Mixed Use Buildout Assumptions

Mixed Use Area	Residential Uses		Non-Residential Uses			
	Dwelling Units per Acre	Residential %	Floor Area Ratio	Office	Commercial	Lodging
Downtown	35	60%	0.80	20%	20%	
East Holt	30	25%	1.0	50%		
			0.80		25%	
Euclid/Francis	30	50%	0.80		50%	
Guasti	30	20%	0.70	50%		
			1.0		30%	
Inland Empire	20	50%	0.50	30%		
			0.35		20%	
Meredith	37.4	23%	0.35	24%	48%	
			0.75			5%
Multi-Modal	60	10%	1.0	45%	45%	
NMC East	25	30%	0.35	30%		
			0.30		40%	
NMC West	35	30%	0.70	60%	10%	
Ontario Center	40	30%	1.0	50%		
			0.50		20%	
Ontario Mills	40	5%	0.75	20%		
			0.50		75%	
SR60/Hamner	25	18%	0.50	25%		
			0.30		57%	