The housing forecast for Hamilton identifies a growth of 110,320 new housing units (including single detached, semi-detached, townhouses, and apartments) by 2051.

The 110,320 units need to be split up by unit type. In Line 2, the Ground-related units include single detached, semi-detached and townhouse (rowhouse) units. Accessory apartments include basement apartments or detached units in an accessory building. Line 2 shows the unit breakdown by type which results when the City plans for an intensification rate of 40% between 2021 and 2051. In the LNA, this is referred to as the Current Trends Scenario. As the rate of intensification increases, the percentage of apartments also increases.
Based on Growth Plan policy areas of Built-Up Area (BUA) and Designated Greenfield Area (DGA), the expected unit growth by each type of unit is divided by the location where the new units will be developed. Click here for a map of these areas. The intensification units (40%) are assigned to the BUA. The rest of the units are assigned to the DGA. A very small portion (220 units) of the overall unit growth is assigned to the rural area, and is not shown in line 3 below.

### Current Trends Scenario

Line 3 identifies the total ‘demand’ for new units in the Designated Greenfield Area as 65,980 units. These 65,980 units are divided between the City’s Existing DGA lands (already in the urban area) and New DGA lands (Urban Expansion Areas) in the next step.
To determine the breakdown of units between the Existing DGA and the Urban Expansion Area, we subtract the potential supply of units in the Existing DGA (line 5) from the demand of 65,980 units (line 4). For this next calculation, the Ground Related units are broken down into Single / Semi-detached units and Rowhouses (townhouses), and Accessory Apartments are grouped with Apartments.

4. Unit Demand in the Designated Greenfield Area to 2051 (LNA Table 11):
   - Singles / Semis: 41,020
   - Rows: 20,980
   - Apartments: 3,970
   \[ \text{Unit Demand in DGA: 65,980} \]

5. Potential Unit Supply in the Existing Designated Greenfield Area in 2021 (LNA Table 10):
   - Singles / Semis: 5,590
   - Rows: 6,910
   - Apartments: 8,060
   \[ \text{Total Unit Supply Existing DGA: 20,560} \]

Subtracting the Potential Unit Supply (Line 5) from the Unit Demand (Line 4) results in the units, by type, that will need to be built in the new DGA (Urban Expansion Area) - see Line 6.
For Singles / semis and Rowhouses, there is a shortfall of available units in the Existing DGA meaning that the additional units will be built in the Urban Expansion Area. For Apartments, there is already more supply of apartments than there is demand in the Existing DGA, so there is no requirement for apartments in the Urban Expansion Area. A total of 45,420 units (49,510 shortfall units – 4,090 surplus apartments) will be in the Urban Expansion Area.
To figure out the required land area needed to accommodate the 45,420 units in the Urban Expansion Area, a density factor by each unit type is applied, measured in units per hectare (line 7).

**Density Factor by Unit Type (uph) and Resulting Net Land Need by Unit Type (LNA Table 14):**

\[
\begin{align*}
\text{Singles / Semis:} & \quad 25 \text{ uph} \times 35,440 \text{ units:} \\
& \quad 1,420 \text{ ha} \\
\text{Rows:} & \quad 46 \text{ uph} \times 14,070 \text{ units:} \\
& \quad 310 \text{ ha} \\
\text{Apartments:} & \quad \text{N/A} \\
\text{Total net land need:} & \quad 1,720 \text{ ha}
\end{align*}
\]

This results in a ‘net’ land need of 1,720 ha. The ‘net’ land need only includes the land needed for each individual housing unit (or the lot area of each new unit). The ‘net’ land area does not include any lands required in the Urban Expansion Area for other uses such as roads, parks, institutional uses, commercial uses, stormwater management etc. These additional uses require the land area to be doubled, as shown in line 8, which provides us with the ‘gross’ land area required for the Urban Expansion Area of 3,440 ha.

\[
\begin{align*}
\text{Net to Gross Ratio Factor} = 50\% \ (LNA \ Table \ 17): \\
\text{1,720 ha} \times 2 = 3,440 \text{ gross ha of land required}
\end{align*}
\]