



OFFICIAL COMMUNITY PLAN FOR THE ELECTORAL AREAS

SCHEDULE G - GROWTH CONTAINMENT BOUNDARIES

METHODOLOGY

Growth Containment Boundaries

From 2006 to 2021, approximately 82% of population growth and 79% of dwelling growth in the Cowichan Valley Regional District (CVRD) occurred outside of the growth containment boundary (GCB). When analyzing all dwellings constructed since 2006, approximately 48% of units were built outside of the GCB. This suggests Bylaw 4373 – Official Community Plan (OCP) requires a new land use strategy that is designed to focus growth within areas that can be effectively serviced and at densities that make development economically feasible and attractive. Conversely, this land use strategy should also discourage further subdivision of rural lands located outside the GCB.

Through several workshops, the project team identified areas within each of the electoral areas that are well served for potential growth and allocated land use densities accordingly. The new GCB is meant to achieve several objectives:

- Link servicing corridors with population growth, where investments in water and sewer infrastructure can be supported by future growth
- Focus growth in strategic locations near village centres, jobs, public transit and other amenities
- Formalize existing development patterns where growth and subdivision have already occurred outside the former GCB
- Ensure densities outside the GCB are reflective of rural land use patterns (below one unit per hectare) and densities inside the GCB are reflective of suburban and urban land use patterns (above one unit per hectare)

The new GCB is thus a more defensible line, supported by land use designations and future servicing plans.

Schedule G maps the growth containment boundaries by:

- illustrating the line that separates areas of growth from rural areas; and,
- highlighting areas within the boundary as areas of growth.

As noted in Section 1.6 of the OCP, Growth Containment Boundaries, the growth anticipated within each GCB is shaped by land use designations that fit each electoral area's unique characteristics. For instance, the GCBs in the south Cowichan (electoral areas A, B, and C) are characterized by more multi-family housing options and a greater mix of uses than the GCBs in more rural electoral areas like G & H, where suburban subdivisions replicating existing development patterns will be more common.

Once the new GCB was established, population and dwelling projections were updated with the following methodology.

Population and Dwelling Projections

Licker Geospatial completed population and dwelling projections as an update of previous analyses undertaken by rennie intelligence. These analyses are publicly available [here](#). An update was requested to reflect two key considerations:

1. Population and dwelling growth have occurred between the original 2016 and updated 2020 baseline years, therefore, rebaselining the population and dwelling projections for 2050 was required; and
2. The development of an updated growth containment boundary, which is part of the OCP (land use and servicing updates) will result in the redistribution of growth based on a redistribution of developable land.

Rebaselining the populations and dwellings was relatively straightforward. First, the change in dwellings from 2017–2020 was determined using BC Assessment's information on the parcel's development year. This amount was then subtracted from the previously estimated 2017–2050 change in dwellings to rebaseline dwelling totals to 2020. As dwelling growth and population growth are only tenuously linked (i.e., population change is a function of births, deaths and migration as well as increased dwelling supply), it was also required to rebaseline population growth to both 2020 and 2050, which was completed using BC Stats 2020 population estimates that leverage similar data points used in the prior work. For both elements, we noted that the 2020 estimates were almost entirely in line with the original projection to 2020 and no significant alterations to the 2050 overall growth estimates were required.

To redistribute population and dwellings to reflect updated GCBs and land uses, Licker Geospatial reused the methods developed in the prior work (i.e., three redistribution scenarios based on developable lands and servicing) but substituted updated inputs that reflect changes to land use designations and servicing. Additionally, the team tested two additional scenarios that incorporated allowable densities as well as developable lands to reflect evolving concepts regarding capacity for growth (see next section). Accordingly, the team created five scenarios to test the effects of both the old and new GCBs on growth distribution in the region:

- Scenario 1: 90% of growth occurs only within electoral area GCBs and growth is redistributed between electoral areas based on proportion of developable lands inside and outside the GCBs. *(Same method as the previous projections but with new inputs.)*
- Scenario 1A: 90% of growth occurs within electoral area GCBs. Growth is redistributed by capacity for new residential development (i.e., allowable densities on developable lands) *(This is a new method.)*
- Scenario 2: 90% of growth occurs within both electoral area and municipal GCBs. Municipal refers to the District of North Cowichan, the City of Duncan, the Town of Lake Cowichan and the Town of Ladysmith. Growth is redistributed between electoral areas and municipalities based on proportion of developable lands inside and outside the GCBs. *(Same method as the previous projections but with new inputs.)*
- Scenario 2A: 90% of growth occurs within both electoral area and municipal GCBs. Growth is redistributed between electoral areas and municipalities by capacity for new residential development (i.e., allowable densities on developable lands) *(This is a new method.)*

- Scenario 3: 75% of growth occurs within areas serviced by sewer and water areas, and 25% of growth occurs in un-serviced areas. Growth is redistributed between electoral areas based on proportion of developable lands inside and outside of serviced areas. *(Same method as the previous projections but with new inputs.)*

The relevant parcel areas (hectares of potentially developable residential lands) that meet each of these criteria were calculated for each electoral area and municipality, where applicable. These areas were then used to proportionally divide out the dwelling changes from 2020 to 2050.

Of note, for each of the scenarios we did not specify the special study area in electoral area A as residential lands because, while these lands may be redeveloped into the future, they require considerably more study/analysis, especially with regard to drinking water.

Once all dwelling projections were recalculated by scenario, a consensus model was created that combines all five of the scenarios above and takes the average of each projection to establish a mean dwelling or population change from 2020 to 2050. This is a conservative approach typically used in scenario modelling that captures uncertainty in projections and recognizes the fact that any of the above five scenarios are equally valid in terms of their effect on distribution of development.

From the consensus model, 2020 dwellings and population numbers were calculated at the sub-regional level, and 2050 dwelling and population growth distributions were established. Additionally, net new dwellings and population were calculated for each year, using the future growth rates estimated in the previous work (i.e., declining rates to 2050). Finally, disaggregate population projections, assumed birth, death and migration rates, and population yields per dwelling unit derived from the previous modelling were also implemented into the current modelling to create more accurate estimates.