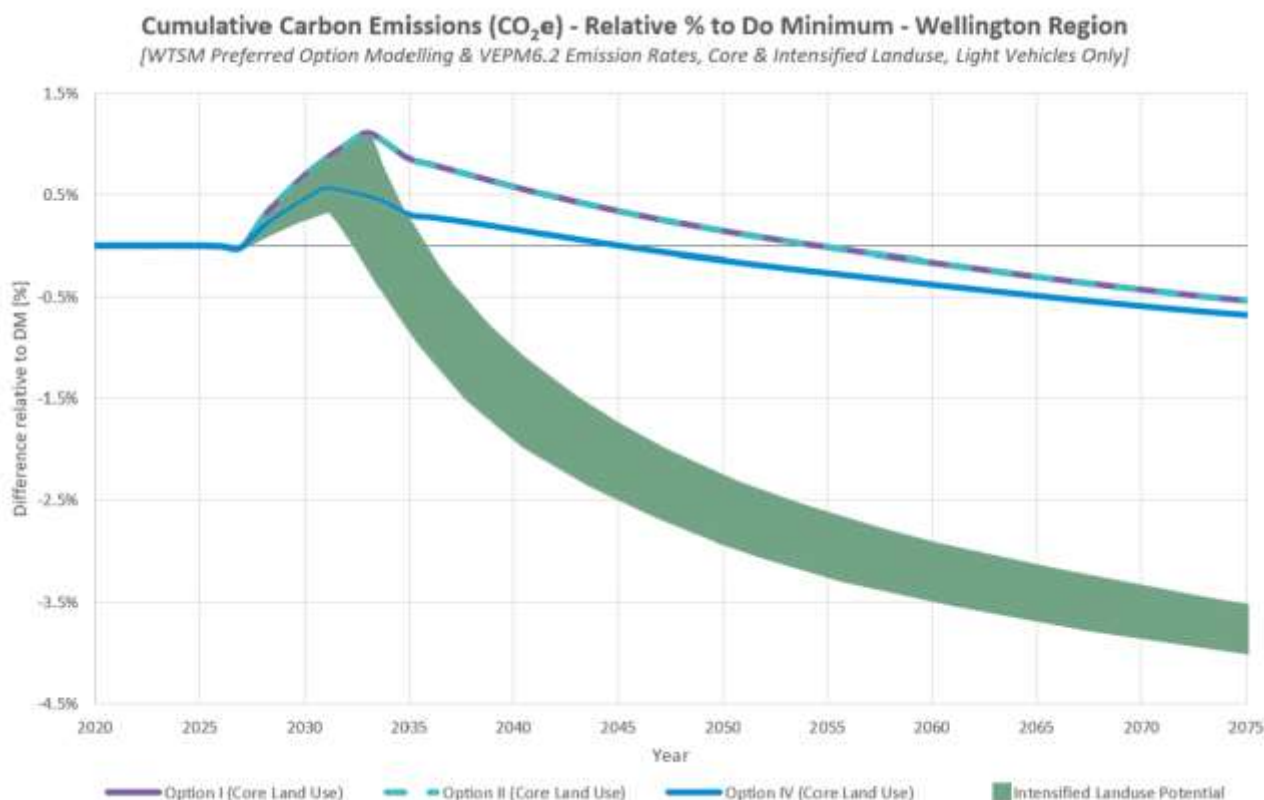


Carbon modelling for preferred option for Let's Get Wellington Moving



Investment in mass rapid transit provides the foundations for a fundamental change to the way Wellington City grows. In a similar manner to the economics, the more intensification that can be enabled, the better the outcome for carbon. This is due to both shorter trips being required and a greater proportion of those trips using active or public transport modes.

The Government's preferred option is likely to enable the highest levels of urban intensification. The high quality MRT corridor to the south will support very high levels of intensification, especially in the sections with dedicated MRT lanes. Furthermore, improved public transport journeys and increased capacity to the east will support mode shift, growth and intensification, and this isn't available in Options 3 and 4.

The green band in figure 1 indicates the potential for carbon emissions reduction in an intensified land use scenario.

The preferred option results in a marginally greater reduction in daily emissions compared to Option 4, primarily due to higher modal shift from the east.

All options reduce daily traffic volumes (expressed as vehicle kilometres travelled, VKT) across the Region (2%) and Wellington City (up to 5%) in the core scenario. Option 1 will result in a slightly greater reduction in VKT, compared to the other options, due to the greater level of PT improvements to the east delivering mode shift.

The level of land use intensification each option enables is likely to have a greater effect on carbon savings than the option itself - greater urban density produces significantly greater carbon emissions savings than the carbon produced in construction.

