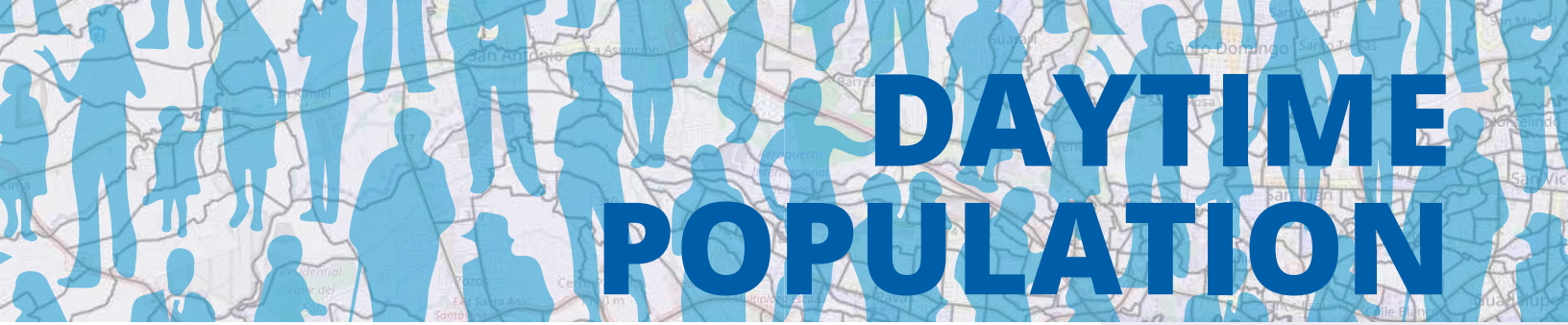
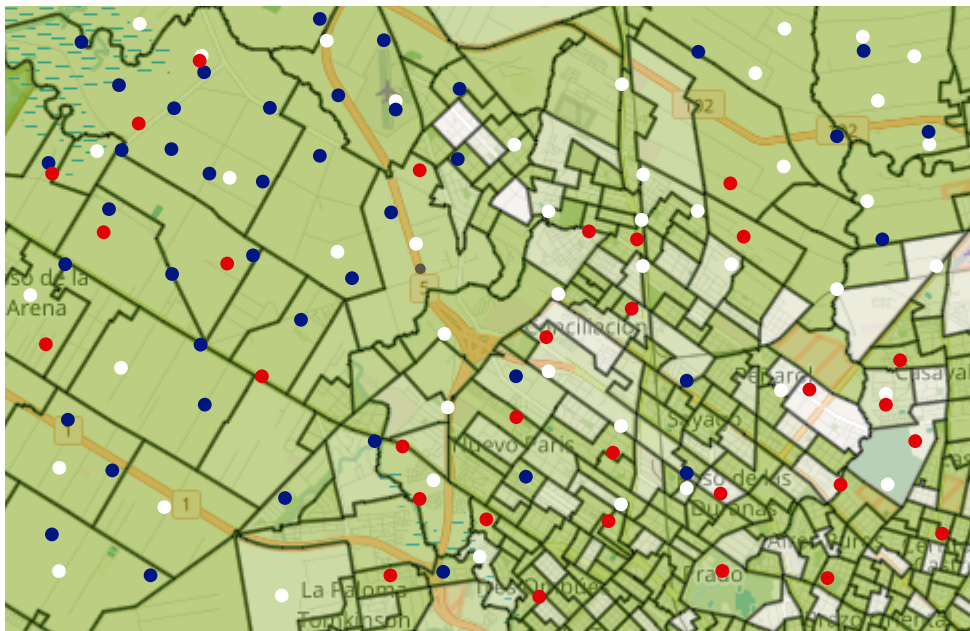




DAYTIME POPULATION

Accurate population data can help answer these fundamental network planning questions. With an empirical population distribution in hand, the network planner can ensure the best quality of service and reception coverage for the greatest number of people. Until now, the problem has always been finding consistent, reliable and current population data. For most of the world, the best available official census data are at province level (i.e., one administrative division below national) and are of varying vintage, sometimes decades old. To address the need for a consistent global, high resolution population database, We have developed a sophisticated algorithm to augment census data by incorporating factors known to affect settlement geography patterns. The resulting dataset provides global coverage of population at 1x1 kilometer resolution, the finest spatial resolution yet developed.



We have made the population data available for all or part of the world either as a stand-alone database or as an optional layer in our Regional and Urban databases.

Measuring ambient population versus residential population.

Most national censuses count populations by measuring where people sleep (or reside) rather than where they work or travel. This Population integrates daytime movements and collective travel habits into a single measure to produce a better representation of where people are located during an average day.

Population model

Probability coefficients are assigned to each value of each input variable, and a composite probability coefficient is calculated for each Population cell, independent of census data, which can then be used to apportion shares of actual population counts within any particular area of interest.

- Coefficients for all regions are based on the following factors:
- Best available population counts from latest national census data.
- Roads, weighted by distance from major roads,
- Elevation, weighted by the presence of favorable slope conditions.
- Land Cover, weighted by type with exclusions for certain types.
- Night-time lights of the World, weighted by frequency gain.