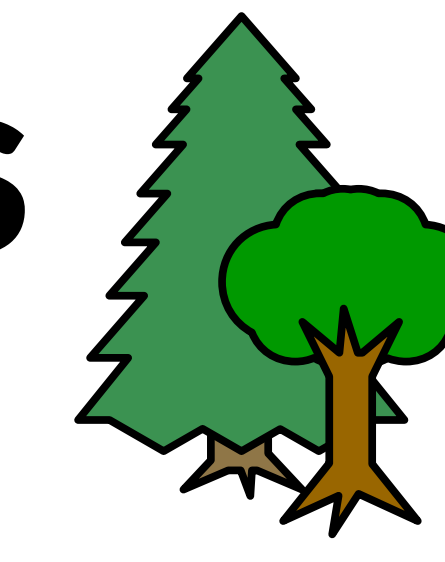


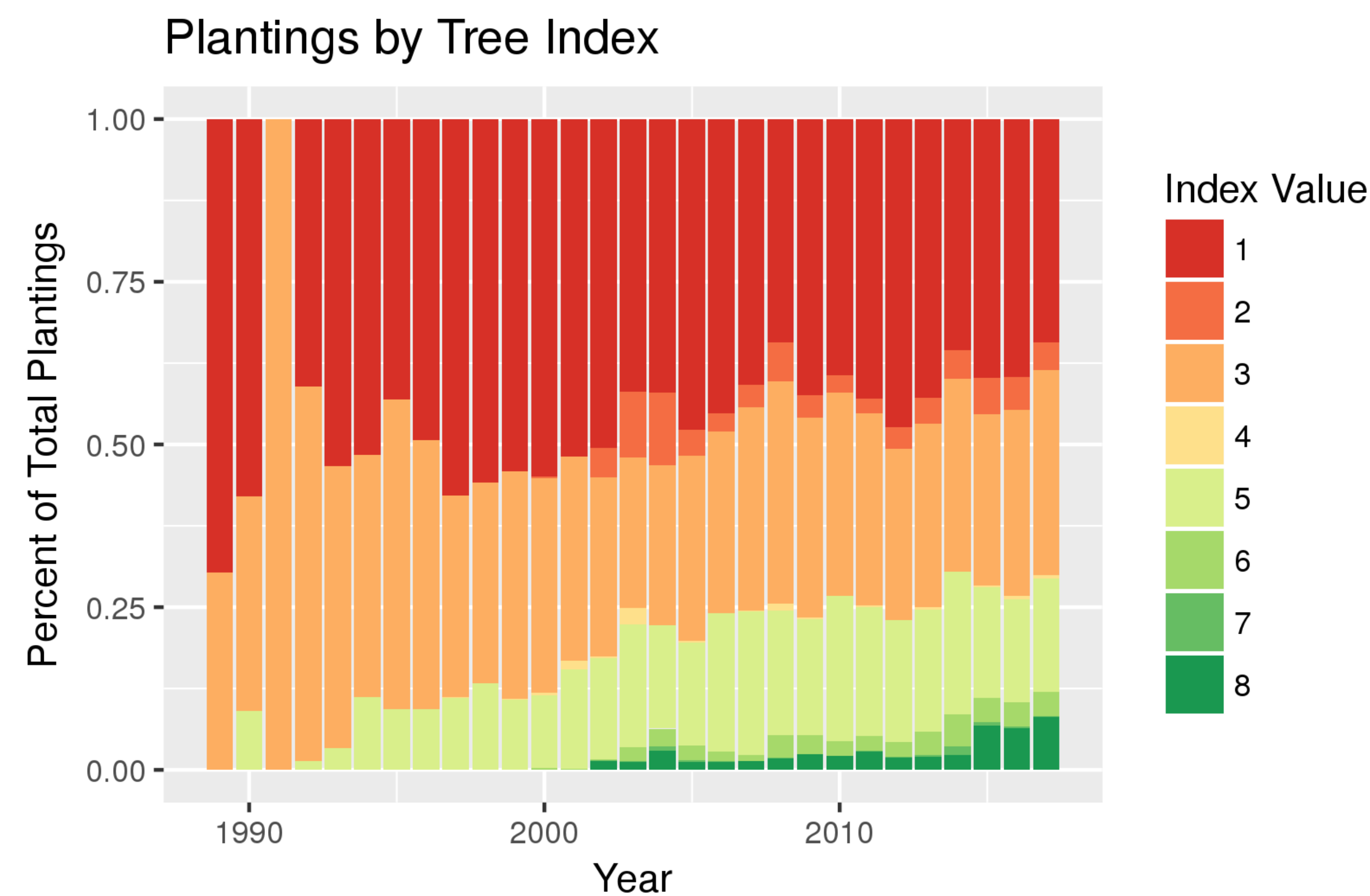
PDX Tree Planting Analysis

Miranda Rintoul & Lirui Jiao



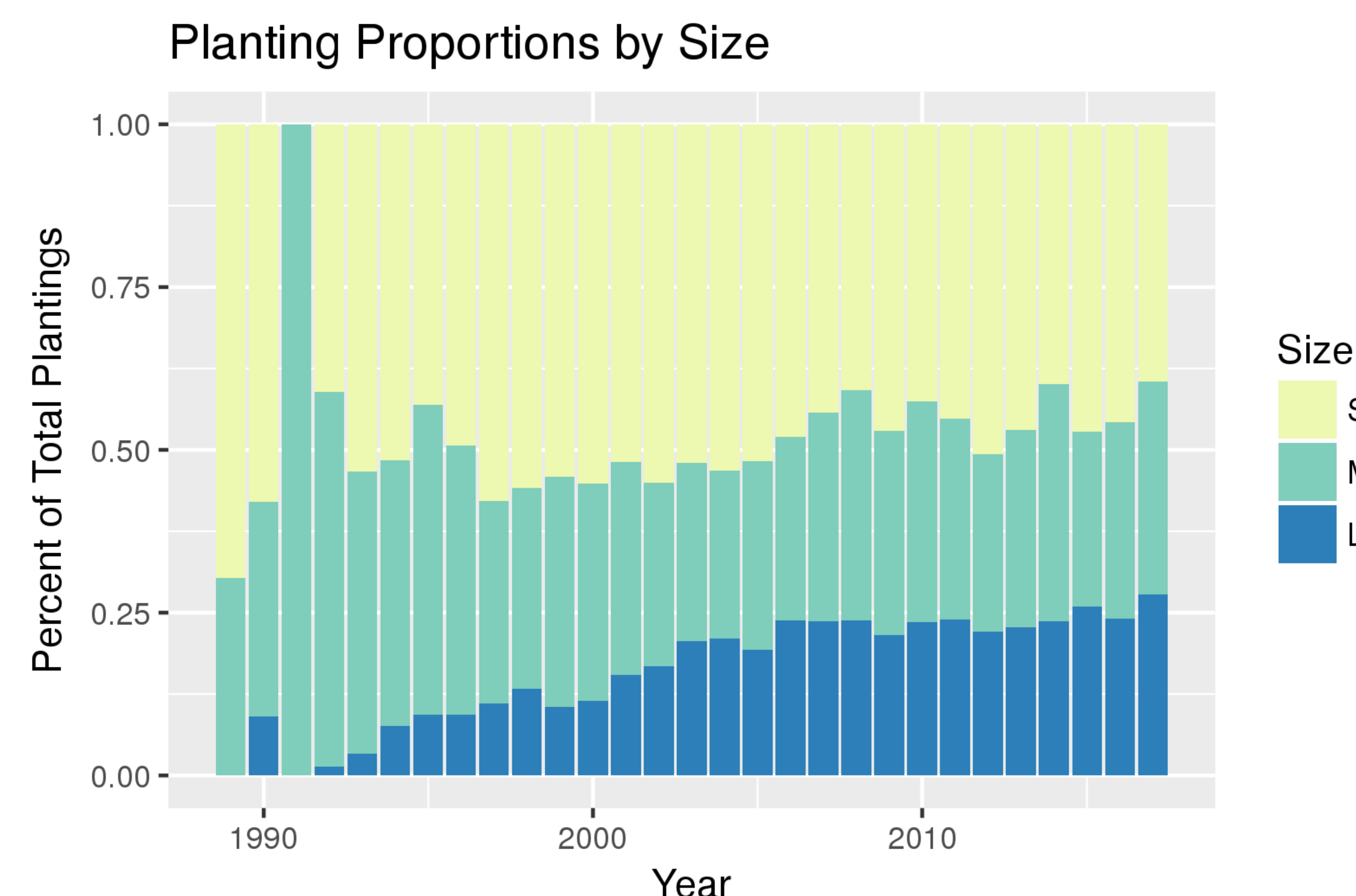
What makes a tree good?

We've created a "tree index" to describe the overall quality of a tree.



The best trees, with an index of 8, are large, evergreen, and native. The worst trees, with a score of 1, are small, deciduous, and non-native. Overall planting quality has improved since 1989.

Tree size over time



The average tree size has improved, but has stabilized in recent years. Small trees are still dominant, but this can be partially attributed to lack of space.

In the past several decades, the City of Portland and the nonprofit group Friends of Trees have increased efforts to plant street trees in Portland. We have posed several questions to evaluate the quality of these planting trends.

Are the right types of trees being planted?

For our purposes, the "right" types of trees are large, evergreen, and native.

Are trees being planted equally across different income boundaries?

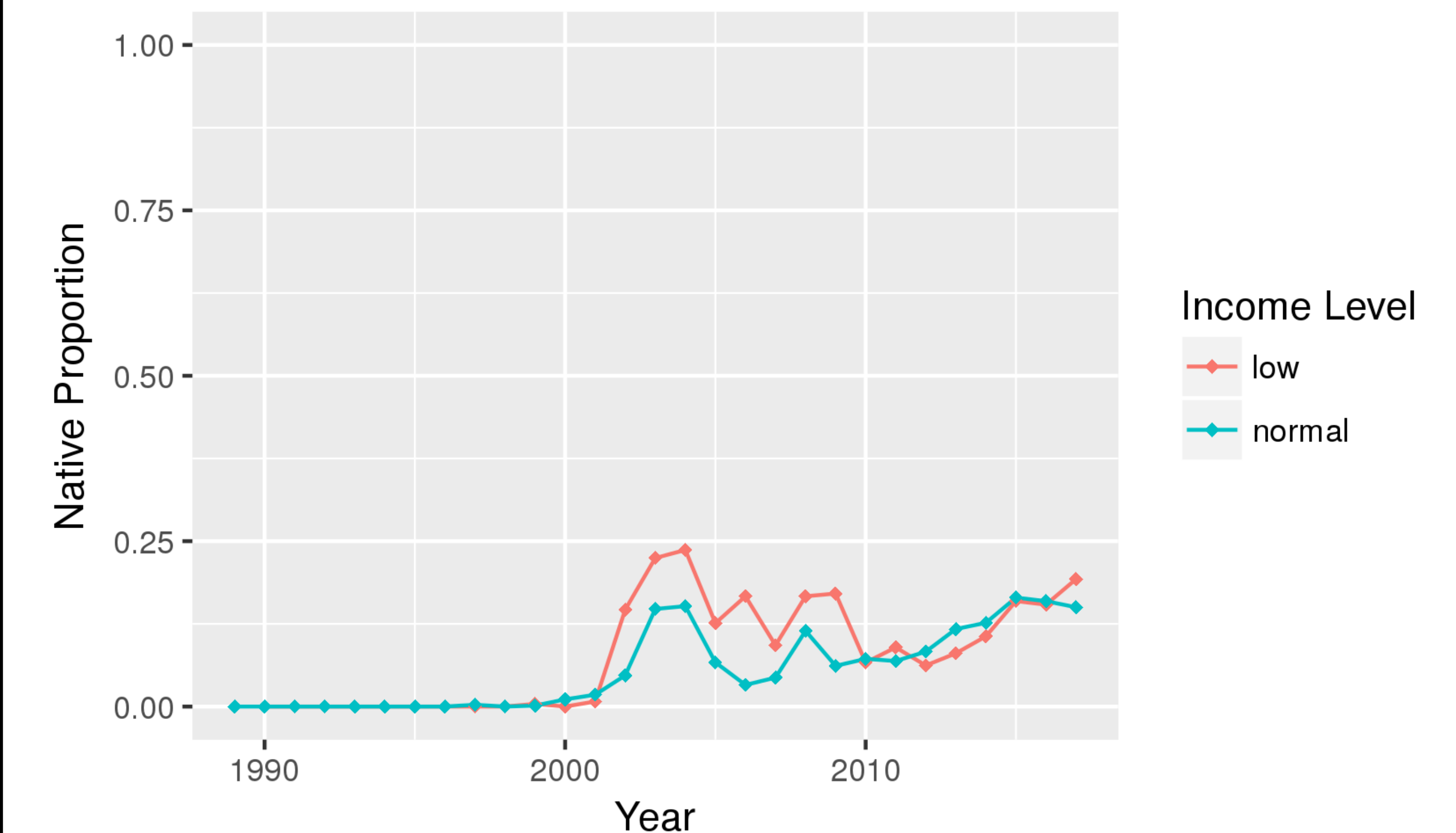
We will compare planting data in low and normal income areas.

Do planted trees persist?

How many of the planted trees are still alive? Do some species persist more than others?

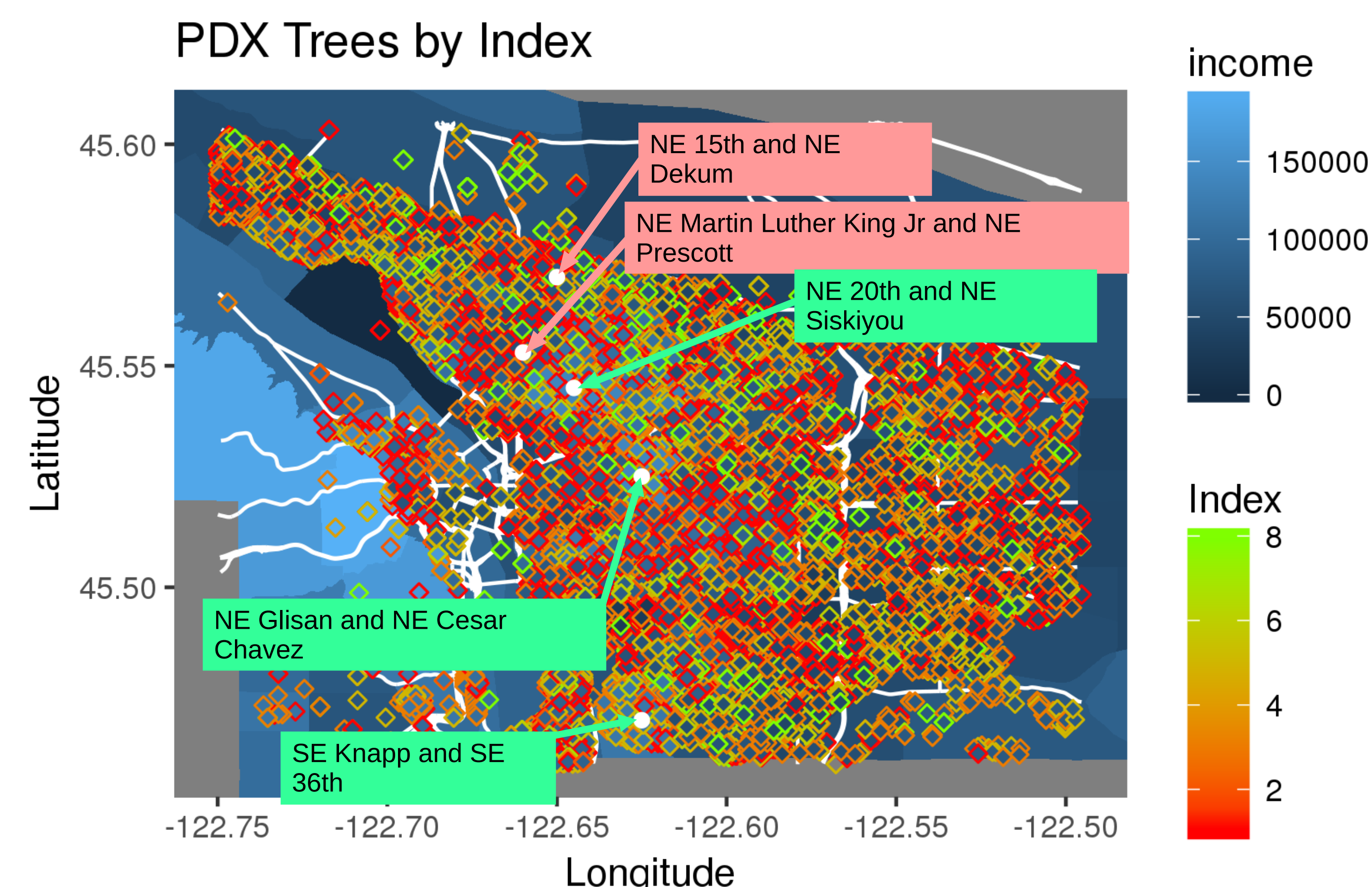
Native trees and income

Native Plantings, Low vs Normal Income



Several variables, including whether a tree is native, are equal across different income areas.

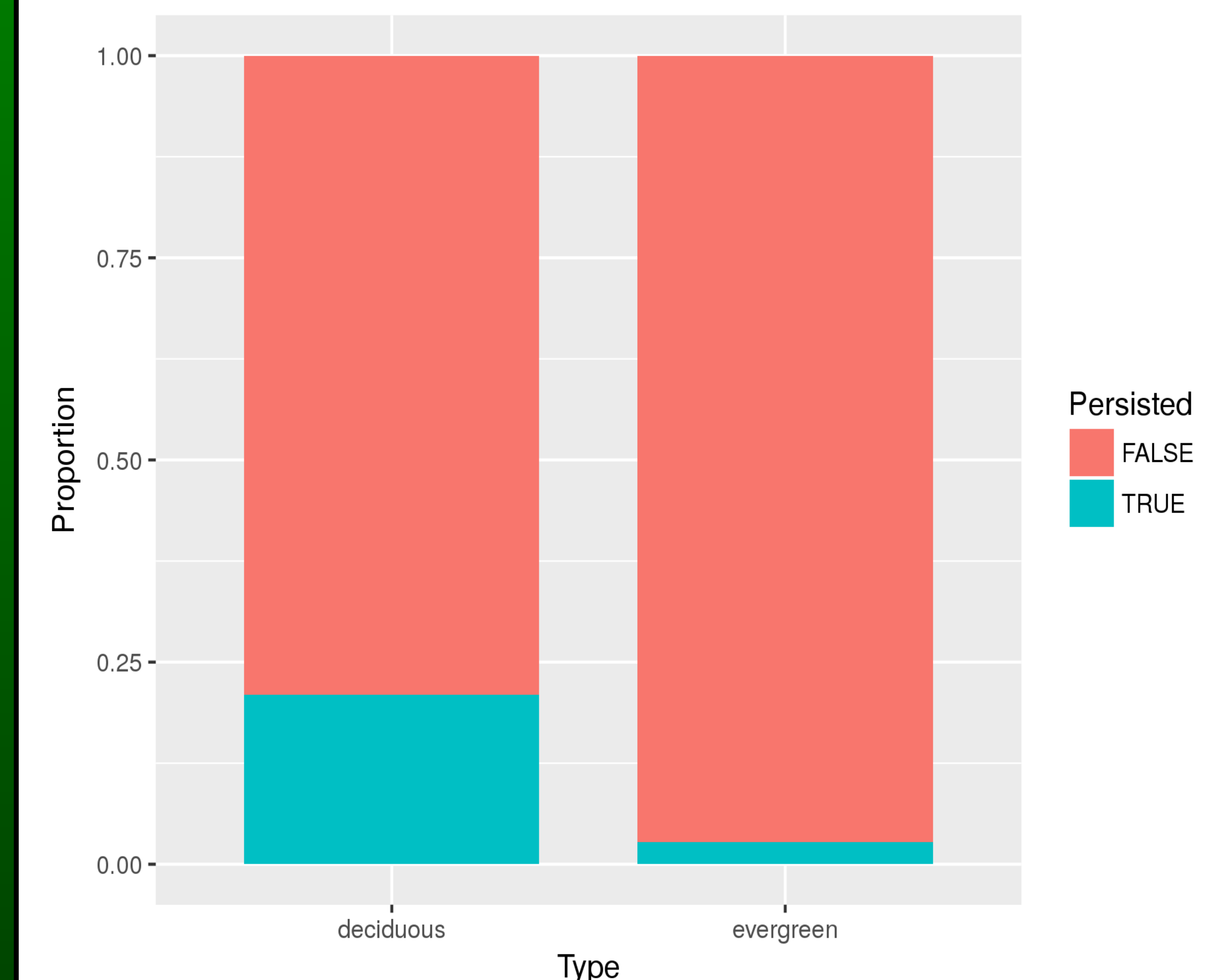
Tree index and income



Planting across income boundaries has been fairly equitable. There are a few areas, however, with relatively low income and relatively poor trees (marked in red) and some places with high income and high quality trees (in green).

Evergreen persistence

Persistence of Evergreen Trees



Evergreen trees, which are generally desirable, have a very low persistence rate.