

Figure 1. Simple sketch to illustrate desired goal

What I have been able to do:
Attribute the total ridership for stops 1, 2, and 3 to the blue region (block group) because those stops lie within that region.

What I would like to be able to do:
Attribute the total ridership for stops 1 and 2 to the blue region (block group) because those buffer zones (red) lie completely within the region AND attribute a proportion of the ridership for stops 3 and 4 to the blue region based on how much of the area of each of their buffer zones lies within the blue region. The remaining ridership for stops 3 and 4 would be assigned to the green region based again on the area of the red buffer zone overlapping each region.

