

## **Abstract**

Turf replacement rebate programs are a water-conservation measure promoted by many local and regional government agencies in California. In an effort to reduce outdoor water use, these programs offer financial incentives to homeowners who replace water-intensive lawns with drought-tolerant landscaping and more efficient irrigation systems. Previous studies, however, have found that landscaping choices are based on more than just economic factors; social pressure, neighborhood norms, and property value are also important considerations, and homeowners tend to opt for landscaping similar to that of their neighbors. This study uses GIS, linear regression, binary logistic regression, and a comparison of means to characterize a spatiotemporal spillover effect in turfgrass replacement rebate program participation data for Long Beach, California. The study determines that residents are more likely to participate in a Lawn-to-Garden program when one or more neighbors on the same block have already completed turfgrass replacement projects. In fact, a block with a single project completion is 5.8 times more likely to see a future application submission than blocks where no projects have been completed, and the highest future application rates occur on blocks where more than 8% of households have already completed a Lawn-to-Garden project. Project completions on adjacent blocks were found to be far less influential. These findings indicate that residents are more willing to replace their conventional landscaping with drought-tolerant gardens after an alternative norm has been established on visually adjacent properties, suggesting that local governments should consider focusing their turf replacement program marketing and support efforts on blocks with no prior participation.