



## HOUSTON ACTION RESEARCH TEAM



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### *Parks: Partners in Flood Alleviation, Fall 2016*

This HART, made up of undergraduate students from Mechanical Engineering, Statistics, Political Science, and Ecology and Evolutionary Biology, provided insight for the Houston Parks and Recreation Department (HPARD) on opportunities for partnerships with the City's Rebuild Houston program. By working together, Rebuild funding could be used for park improvements that would also help with storm water storage and flood alleviation during rainfall events to compensate for decreasing green space in the city due growth and development. The team analyzed rainfall data from over 100 gauges across Harris County as well as over 8,000 311 flooding reports from the past five years in order to identify flood-vulnerable locations. Considering HPARD's top priorities for park renovations and areas of focus for the Rebuild Houston initiative, the team developed a list of ten parks across Houston as well as a list of potential projects that could be implemented at each park to achieve possible flood reductions in the surrounding areas. Findings revealed that some areas of Houston experience repeated flood loss, even during small or moderate rain events, making them ideal locations for targeted flood alleviation projects.

