



CENTER FOR CIVIC LEADERSHIP
RICE UNIVERSITY

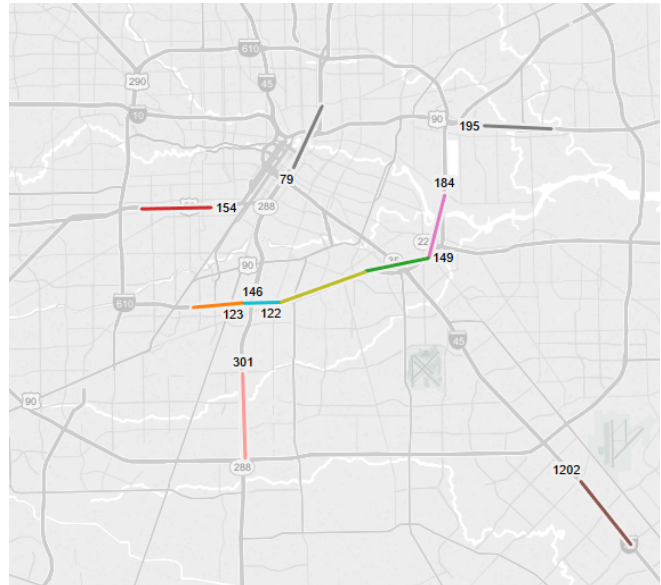
HOUSTON ACTION RESEARCH TEAM



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HPD SafeClear Congestion Analysis, Summer 2015

This HART brought together undergraduate students with majors in Statistics, Political Science, Computer Science, Mathematics, and Math Economics to improve public safety on Houston freeways. Charged by the Houston Police Department (HPD) with assessing the effectiveness of the SafeClear program and the relative impact of collisions on traffic congestion, the team identified times of day and locations on Houston freeways where collisions were most likely to have the largest impact on traffic congestion. The team combined three sources of data from TransStar, the Texas Department of Transportation and the Texas Transportation Institute to create an innovative method of comparing areas on Houston freeways where collisions had the largest effect on traffic congestion. Using Rice's DaVinCI super computer, the team analyzed millions of data points pertaining to Houston traffic. The team presented their results to HPD, recommending times of day and locations where Rapid Response Units could have the largest impact on improving public safety and reducing traffic congestion from collisions.



Highlighted segments identify potential locations for Rapid Response Units.