

HARC Research Analyzes Effects of COVID-19 and Stay-at-Home Orders

HOUSTON, TX – HARC (Houston Advanced Research Center) announces a research analysis to study effects of COVID-19 and associated stay-at-home through data sets assessing mobility, air quality, and energy usage.

"In addition to slowing the rate of infection, reducing the burden on medical facilities, and saving lives, stay-at-home orders also have far reaching effects on infrastructure systems, communities and the environment. The research HARC develops is an opportunity for organizations to better understand a wide-range of COVID-19 implications." said Lisa Gonzalez, President and CEO of HARC. "The results of this work will inform and assist community stakeholders. Lessons learned can also inform planning and adaptation efforts for future public health crises and extreme events such as natural disasters."

With the novel coronavirus pandemic, many stay-at-home orders are in place throughout the Greater Houston region and across the state of Texas. HARC's first analysis under this effort analyzed the extent to which Harris County and regional residents reduced average daily travel during COVID-19 pandemic. Using a baseline, the change in average distance is compared to establish relationships between implementation of social distancing measures and public response.

The mobility analysis was led by Dr. Gavin Dillingham, HARC's Program Director for Clean Energy Policy, and Dr. Meredith Jennings, a Postdoctoral Research Scientist in Community Resilience. Results of the analysis are posted in a summary document <u>online</u>.

"Data drives research, and in this analysis, shows explicitly how vehicular traffic and mobility were effected by COVID-19 and associated regulatory measures," states Dr. Gavin Dillingham, Program Director at HARC. "With this ongoing study, the region will have a better understanding of how effective the messaging and directives were in influencing mobility, and whether this behavior modification ultimately impacted a flattening of the curve or helped to lessen COVID-19's spread."

Researchers at HARC are analyzing data describing regional air quality, transportation, and energy demand to determine the extent of regional and statewide changes due to COVID-19 and the resulting stay-at-home orders. In the coming weeks, HARC will work to gather and share this information broadly. Please visit HARCresearch.org to learn more.

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About the Houston Advanced Research Center

HARC is a nonprofit research hub providing independent analysis on energy, air, and water issues to people seeking scientific answers. Its research activities support the implementation of policies and technologies that promote sustainability based on scientific principles. HARC is a 501(c)(3) nonprofit organization building a sustainable future in which people thrive and nature flourishes. For further information, contact HARC at harcmedia@harcresearch.org or visit <u>www.HARCresearch.org</u>. Connect with HARC, via <u>Instagram</u>, <u>LinkedIn</u>, <u>Facebook</u> or <u>Twitter</u>. Like or follow @HARCresearch.