FR10.30.16 Crude Responses: A Comparative Analysis of the 2015 Santa Barbara Oil Spill and 2010 Gulf Oil Spill and Implications for Coastal Cities

Presenter: Robert Collins, Dillard University (rcollins@dillard.edu)
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In May of 2015, a pipeline in Santa Barbara County, California, owned by Plains All American Pipeline Company, ruptured, spilling tens of thousands of gallons of crude oil into the environment, with thousands of gallons reaching the ocean. This study analyzes the government and industry response to this oil spill, and compares them with the responses to the much larger Gulf of Mexico Oil Spill of 2010. The following research questions are answered: 1. Were lessons learned in the Gulf Oil Spill applied in responding to the Santa Barbara Oil Spill? 2. Was the response to the Santa Barbara Oil Spill faster and more efficient than responses to past oil spills? 3. How can oil spill mitigation be improved in the future? 4. What are the long-term environmental effects of oil spills to affected human populations? Given the fact that the economies of many coastal cities are intertwined with the oil and gas industry, and that oil will continue to be the dominant energy source, it is highly probable that more oil spills will occur in the near future. Therefore, it is necessary for coastal cities to have plans in place to mitigate them. This research is funded by National Science Foundation Grant #1552625.

FR10.30.16 Behavioral and Contextual Factors Affecting Fire Department Response Times: Implications for Urban Managers and Planners

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Fire departments live and die by their response times. They are under pressure from the National Fire Protection Association to comply with acceptable emergency response times. We seek to determine what behavioral and contextual factors affect an important measure of emergency response: turnout time. Turnout time measures the time elapsed from when the emergency dispatcher informs the fire unit of an emergency and when the unit leaves the fire station. We conduct an experiment with a large urban fire department where randomly-selected units receive personnel training on improving turnout times, and other units do not. We seek to determine if training modules on reducing turnout times are (1) effective, and (2) whether these effects are short-lived or long-term. Additionally, we test whether or not station design affects turnout times. We find that the training modules do work and have a slow rate of decay. We also find that traditional fire station designs increase turnout times. These findings are of interest to urban managers and city leaders seeking to improve public service delivery. They are also of use for city planners seeking the best functional design of fire stations.

FR10.30.16 An Analysis of the Economic and Institutional Factors Affecting Recovery by State and Local Governments from Hurricanes

Presenter: Jesseca Short, University of North Texas (jesseca.short@unt.edu)
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This paper examines the impact of major hurricanes on changes in GDP for four states – Alabama, Florida, Louisiana, and Texas. The analysis examines the effectiveness of intergovernmental financing for

major hurricanes between 2000 and 2014. It also examines whether institutional proximity of the disaster management function to the Governor's Office and the career status of the director affect the speed of recovery from the disaster. The analysis also assesses the impact that a state's prior experience at dealing with disasters has on the speed of recovery.