1 Our Subfield

Xian Yang. et al. "Impact of Road-Block on Peak-Load of Coupled Traffic and Energy Transportation Networks". In: *Energies* 11 (2018), pp. 1–12

- What did they do:
  Built a simulation model to study impact of electric vehicles on the power grid
- Relevance:
  Implementation of multiplex network of road/power
- Notes:
  paper is very sparse on math and details

Javier. Salmeron and Aruna Apte. "Stochastic Optimization for Natural Disater Asset Prepositioning". In: *Production and Operations Management* 19 (2010), pp. 561–574

- What did they do:
  built a stochastic prepositioning model for classical disaster response (food/shelter/etc)
- Relevance
  May be adaptable to prepositioning work for 2 stage power grid problem

2 Power Grid

Seth. Guikema, Steven. Quiring, and Seung-Ryong Han. "Prestorm Estimation of Hurricane Damage to Electric Power Distribution Systems". In: *Risk Analysis* 30 (2010), pp. 1744–1752

- What did they do:
  Built a GLM to predict damage to power grid elements based on information about hurricane
- Relevance:
  Relevant to inventory prepositioning analysis
  maybe useful for inclusion of crew predetermining in recovery model
- Notes:
  I need to brush up on data mining techniques if I want to start using methods from this paper

Mehdi. Golari, Neng. Fan, and Jianhui Wang. "Two-stage stochastic optimal islanding operations under severe multiple contingencies in power grids". In: *Electric Power Systems Research* 114 (2014), pp. 68–77

- What did they do:
  Modeled optimal power grid islanding using a two stage stochastic MIP on IEEE Bus 30

- Relevance:
  Grid Modeling, stochastic examples, and use of load shedding as an objective

3 Road Grid

James. Winkler et al. "Performance assessment of topologically diverse power systems subjected to hurricane events". In: *Reliability Engineering and System Safety* 95 (2010), pp. 323–336

- What did they do:
  Did damage modeling and analysis of real-geography power grids in Texas subjected to hurricanes
- Relevance:
  Handles dual Road/Power networks
  Handles last mile distribution by tying load to closest substation
- Notes:
  May be worth contacting them to see if we can get their data

4 Hurricanes

Min. Ouyang and Leonardo Duenas-Osorio. "Multi-dimensional Hurricane Resilience Assessment of Electric Power Systems". In: *Structural Safety* 48 (2014), pp. 15–24

- What did they do:
  Defined Resilience and recovery for hurricanes on power grids
- Relevance:
  Information about damage rates of various grid elements
  Basic "real world" rules for status quo repair scheduling
- Notes:
  more focused on social impact and talks about multiple infrastructure layers as a thing that needs to be considered.

5 Other

Nils. Svendsen and Stephen Wolthusen. "Connectivity models of interdependency in mixed-type critical infrastructure networks". In: *Information Secruity Technical Report* 12 (2007), pp. 44–55

- What did they do:
  Built a framework for handling multi-layer dependencies in infrastructure networks

- Relevance:
  Any inclusion of dependent networks will need this

6 Other