Major Problems

1. Communication

- i) Means of communicating
 - (a) Social media not sufficient they require power and many people do not use them. There were meetings on Facebook and Twitter. The Facebook meeting was badly arranged on WEBEX. Participants couldn't see questions, so much of what they talked about was a waste of time – spent time congratulating each other or blaming ERCOT
 - (b) TV not sufficient because requires electric power
 - (c) Radio is better. Encourage people to have battery-operated radios available.
- ii) Information
 - (a) Transparency was BIG problem. Information was either lacking or inconsistent
 - (b) Rolling black-out" turned into days without power. People were not told this at any point.
 - (c) No warning of water shut-off. On Facebook meeting, said water would not be a problem.
 - (d) Citizens were told to let faucets drip, then to shut them off
- iii) Language
 - (a) Not enough translation into languages other than English

2. Loss of Community Trust

a) Inconsistent and incorrect information led people to distrust authorities, a problem that has long-term consequences even outside of an emergency event. E.g., current inconsistent communications from ERCOT about possible blackouts during hot weather.

3. Outreach

- i) Vulnerable populations elderly, people with medical issues or equipment requirements, students in apartments on their own for the first time or without disaster information
- ii) Unhoused had few resources. Do not have IDs for hotels.

4. Electric power

- i) Lack of foresight (see "rolling blackout" above)
- ii) Inequities in loss of power some lost for days; others did not
- iii) Conservation e.g. downtown buildings fully lit when no one was there
- iv) No place to charge phones or computers
- v) Cell towers froze in some places
- vi) People with electric stoves couldn't heat food or boil water

5. Heat

- a) Indoor temperatures were at or below freezing.
- **b)** Elderly and frail people in danger of hypothermia (Irene Konig comment)

6. Water

- i) Lack of potable water supplies
- ii) No means of distributing. Many neighborhood and nonprofits organized to do this

- iii) Major issues of sanitation. E.g., babies and anyone wearing diapers; flushing toilets; bathing and hand-washing
- iv) Fire hydrants were not available to supply water. Some not available to fight fires because hydrants were frozen.
- v) Longer term effects many frozen and broken pipes, causing expensive damage
- vi) Building code does not require insulation. Condominium with outside closets for water heaters and fire sprinklers.

7. Food shortages and unavailability

- a) Stores had long lines and bare shelves
- b) People could not use food they had because no means to cook it
- c) Many stores and restaurants were not open

8. Lack of accountability and services

- i) Renters live in places with absentee property managers; no one available to deal with emergency, in addition to a lack of stockpiles within complexes that caused residents to rely solely on their existing stockpiles or neighbors, who may have been in just as desperate of a situation with respect to such supplies.
- ii) Calls to 311 were not answered
- iii) No points of contact for emergencies all lines were busy for hours
- iv) Austin Mutual Aid found hotels and food. City said they would be paid, but that has not happened. Other organizations are in similar position.
- 9. No places for people to get shelter
 - i) Fire department came to put out fire; then left without helping stranded occupants
 - ii) Overnight shelters not available for people with no heat in their homes
 - iii) No shelter for stranded drivers, including those in emergency vehicles
 - iv) Homeless people unsheltered
 - v) Animal shelters closed; animals left uncared for
 - vi) Loss of other discrete, essential services
 - (a) What is the definition of emergency or catastrophe services, but also what happens when those services do not work? When the people who can't operate the services, who is in charge?
 - (b) How often are drills and training happening that are preparing those who need to execute
 - (c) plans that are in place?

10. Roads and transportation

- i) Lack of equipment to clear roads.
- ii) People could not drive to places with power, including emergency services
- iii) Ambulances did not have chains or four-wheel drive. Many got stuck.

11. Price gouging

 i) Hotels were full and were charging \$1000/night. Note that representative of Austin Hotel and Lodging Association said they dealt immediately with any reports of price gouging. People can report unreasonable costs to them.

12. Role of nonprofits and neighborhood groups

- a) Many nonprofit organizations stepped up quickly, organizing groups to deliver and distribute bottled water, food, sanitary supplies in different parts of the city.
- b) Breweries produced bottled water quickly.
- c) Need to understand how Red Cross and other organizations helped or coordinated a response on the ground

13. Mental Health

- a) Through the combination of the above issues, a general sense of uncertainty created great anxiety
- b) As we continue to weather extreme events where power and other resources will be tenuous, people may feel increased distress