

“I mean, I can lift a shovel”: Design Skills in Disaster Response

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This is a UX professional.



Service design

Visual & graphic design

Database design

User research

Hurricane Katrina, 2005

80% of New Orleans underwater, >1M people displaced

Deepwater Horizon Oil Spill, 2010

134M gallons of oil spilled into the Gulf of Mexico

COVID-19 pandemic, 2020 +

Um...hi

Hurricane Ida, 2021

Second most damaging hurricane to Louisiana

Anatomy of a disaster

Roughly.



Preparation

Anatomy of a disaster

Roughly.



Preparation

Warning

Anatomy of a disaster

Roughly.



Preparation

Warning

Impact

Anatomy of a disaster

Roughly.



Preparation

Warning

Impact

Relief

Anatomy of a disaster

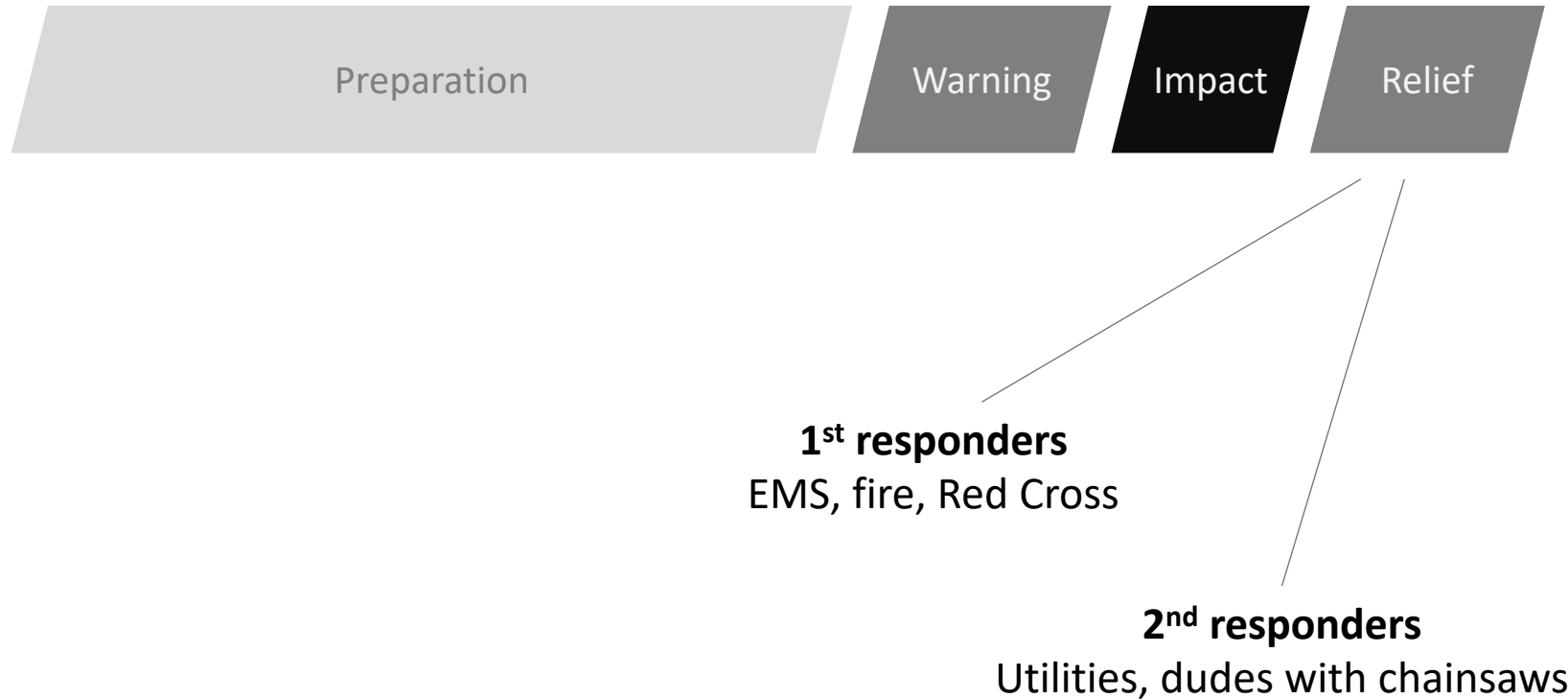
Roughly.



1st responders
EMS, fire, Red Cross

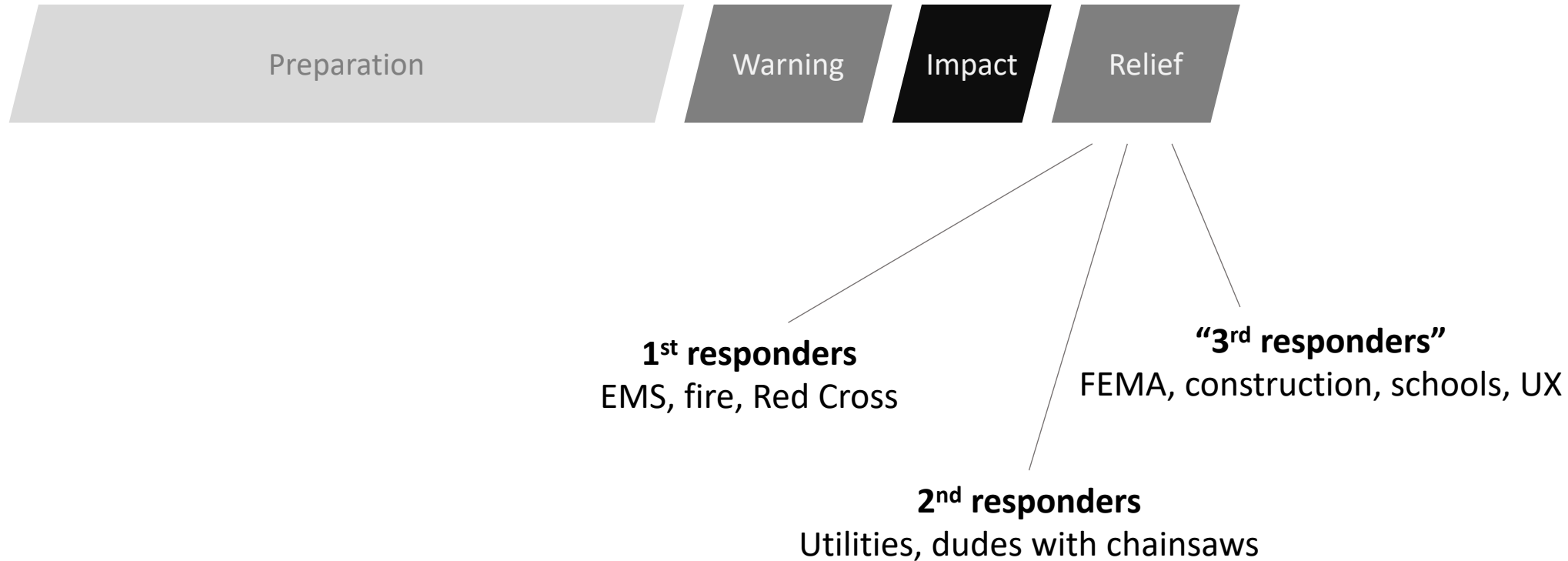
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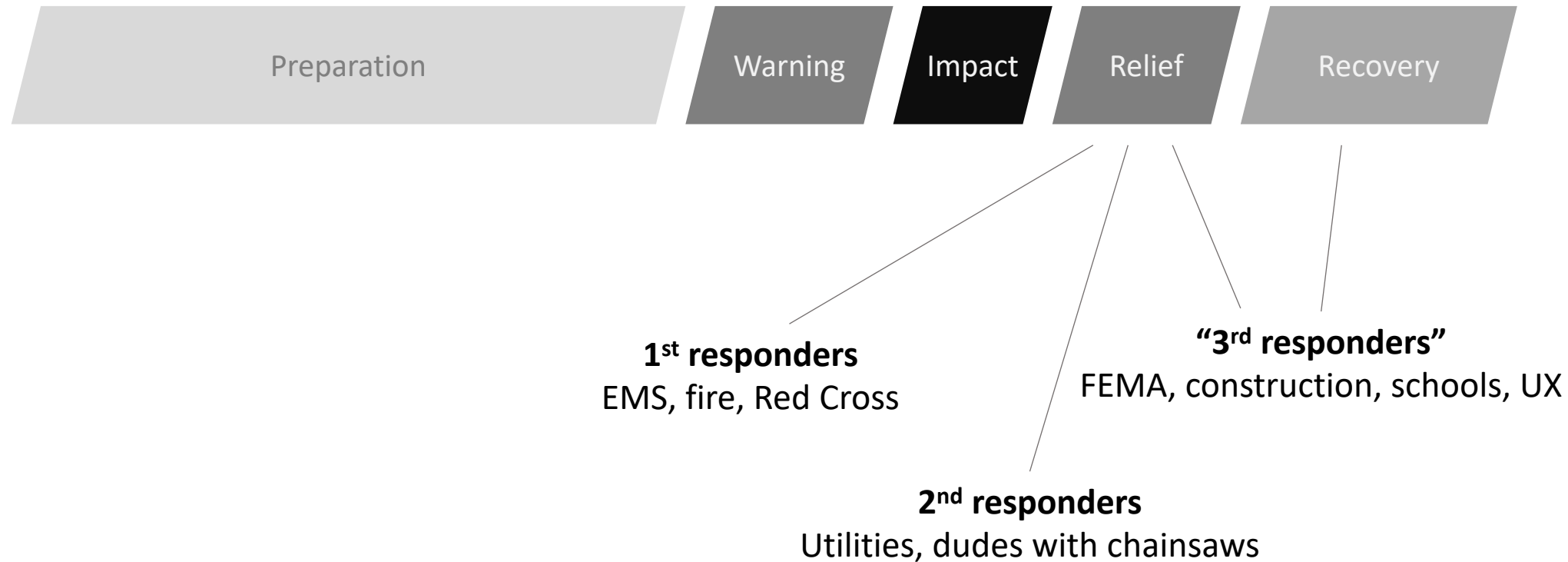
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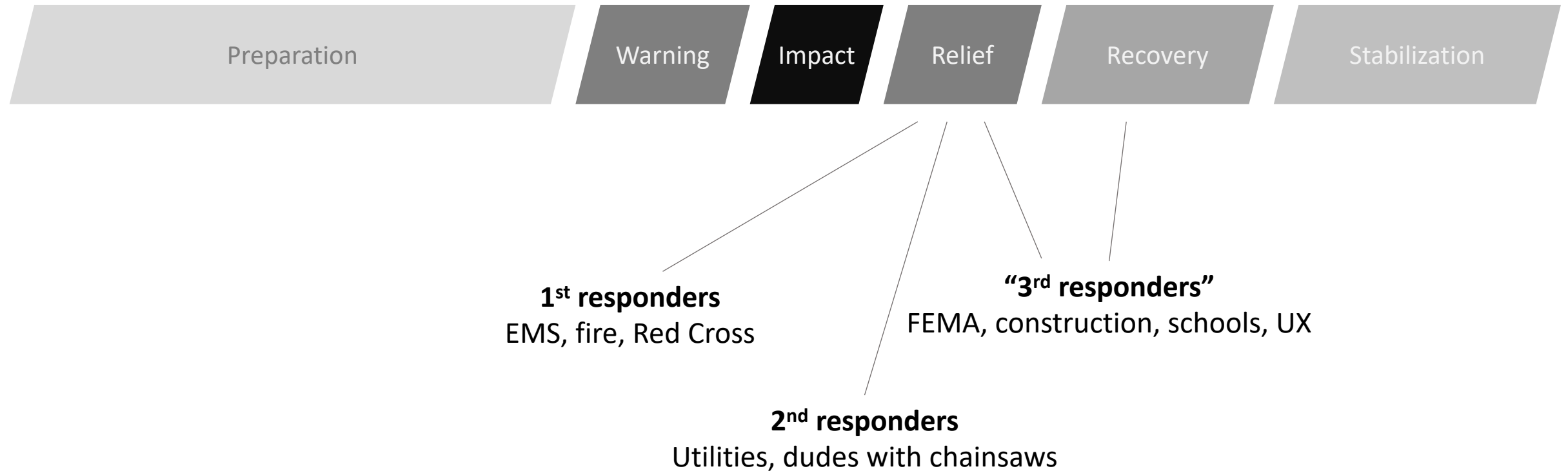
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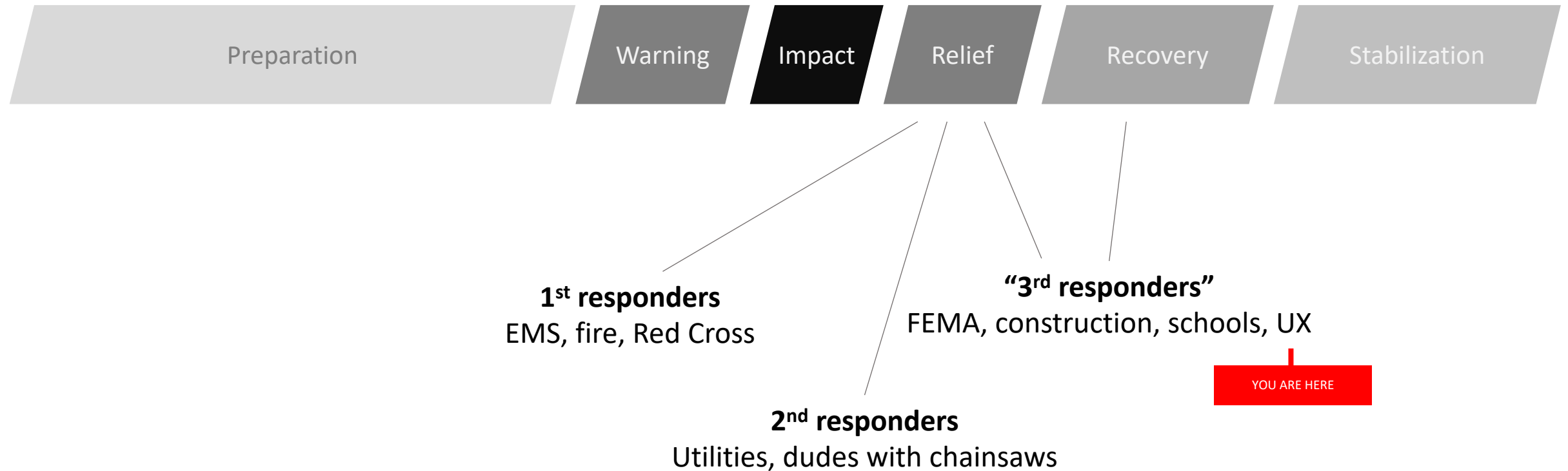
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STORYTIME

Improve service accessibility

Services are stood up fast. Design can get the resources to people who need them.



Some things are obvious

But move quickly as needs change fast.



New Orleans:

Flooded streets:

- CARROLLTON UNDERPASS
- PRESS UNDERPASS
- DOWNMAN UNDERPASS
- 3500 MIMOSA CT
- POLAND AVE / N CLAIBORNE AVE
- ROBERT E LEE BLVD / WISNER BLVD
- 10200 CHEF MENTEUR HWY
- WOODLAND DR / TULLIS DR
- AIRLINE HWY / MONROE ST
- BANKS ST / S BROAD ST
- SAINT BERNARD AVE / MILTON ST
- VESPASIAN BLVD / SHIRLEY DR
- CROWDER BLVD / DWYER RD
- BULLARD AVE / MORRISON RD
- MORRISON RD / PRIMROSE DR
- HARRISON AVE / CANAL BLVD
- PONTCHARTRAIN BLVD / 18TH ST
- WESTBANK EXPY IN / GENERAL DE GAULLE DR
- LAKE FOREST BLVD / WRIGHT RD



- WRIGHT RD / DWYER RD
- S GALVEZ ST / CANAL ST
- S CARROLLTON AVE / TULANE AVE
- 5822 LAFAYE ST
- CARROLLTON AIRLINE EXIT / I-10 W
- S CLAIBORNE AVE / NASHVILLE AVE
- 10700 ROGER DR
- 3904 GENERAL OGDEN ST
- 3629 LEONIDAS ST
- 9024 PALM ST
- 8515 STROELITZ ST
- CECIL ST / OLIVE ST
- S CARROLLTON AVE / NERON PL
- CLEMATIS ST / GLADIOLUS ST
- GENERAL DE GAULLE DR / HOLIDAY DR
- 2600 BLK PRENTISS AVE
- 8422 PALM ST
- KABEL DR / MACARTHUR BLVD
- HOLIDAY DR / VIXEN ST
- 3021 DEERS ST
- 2400 GENERAL DE GAULLE DR
- GENERAL DE GAULLE DR / SHIRLEY DR
- 6003 MARIGNY ST
- 3303 MISTLETOE ST



Debris on streets:

- VESPASIAN BLVD / WESTBEND PKWY
- WESTPARK CT / CYPRESS ACRES DR
- WASHINGTON AVE / S CLARK ST
- LOUISIANA AVE / MAGAZINE ST
- 1900 FELICITY ST
- 2500 BLK HOLIDAY DR
- MARDI GRAS BLVD / BEHRMAN AVE
- 100 CARONDELET ST
- 2300 PRYTANIA ST
- 1400 BLK L B LANDRY AVE
- POYDRAS ST / TCHOUPITOULAS ST
- POYDRAS ST / MAGAZINE ST
- POYDRAS ST / O'KEEFE AVE
- PERDIDO ST / LOYOLA AVE
- LOYOLA AVE / POYDRAS ST
- ORLEANS AVE / N SAINT PATRICK ST
- OLEANDER ST / LIVINGSTON ST
- SYCAMORE ST / CAMBRONNE ST
- 3230 KABEL DR
- 6535 E HERMES ST
- MOBILE ST / AUDUBON ST
- 2711 MAGNOLIA ST

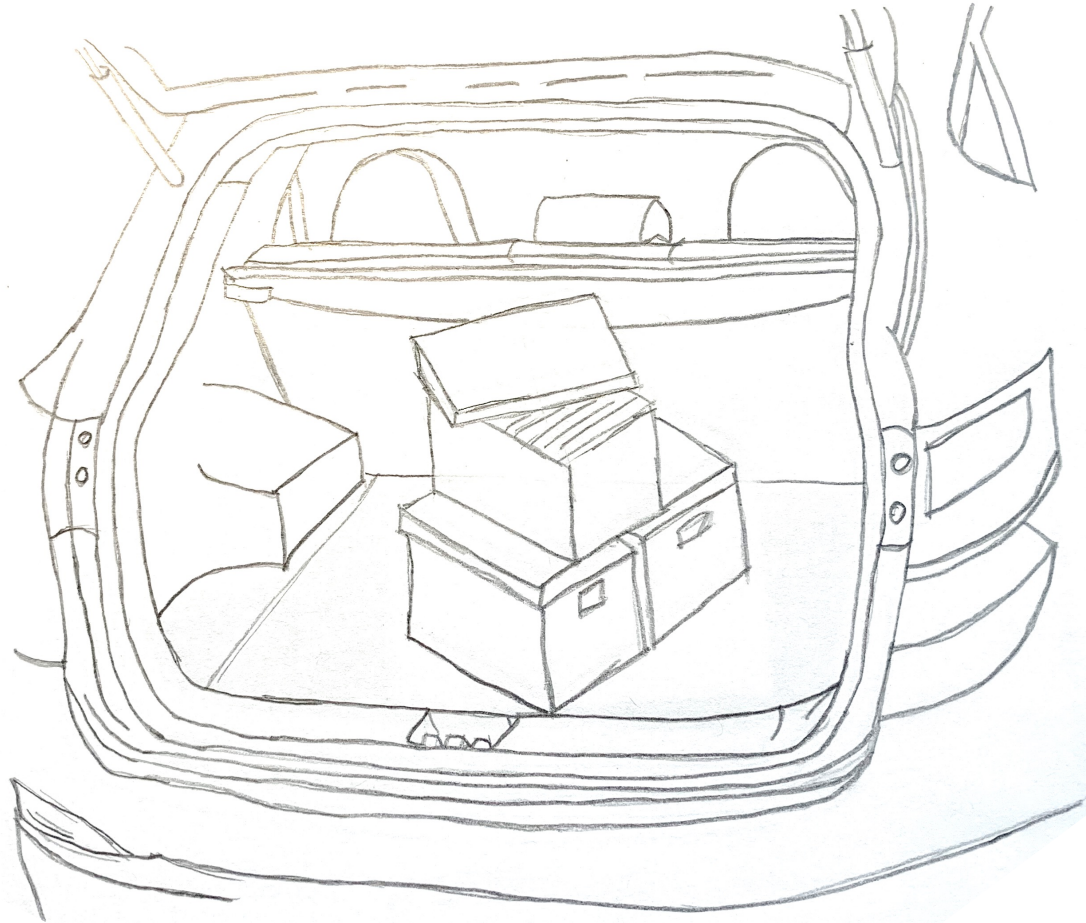
Support decision making with data

Services generate data. Design systems to organize and protect it.



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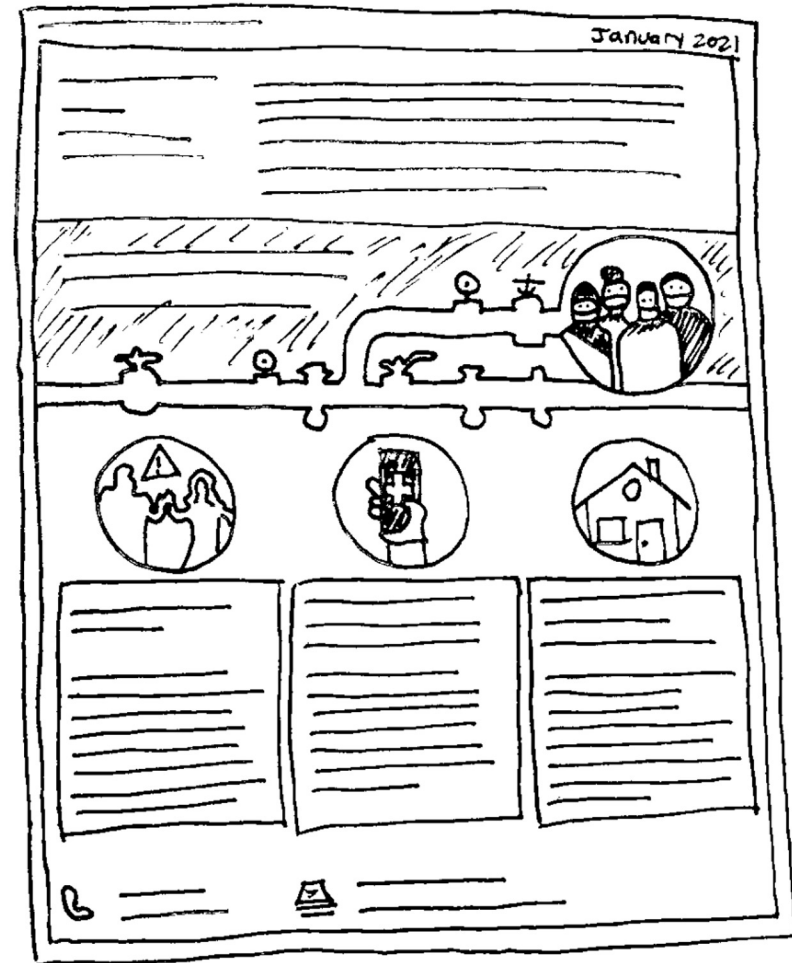
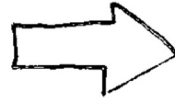
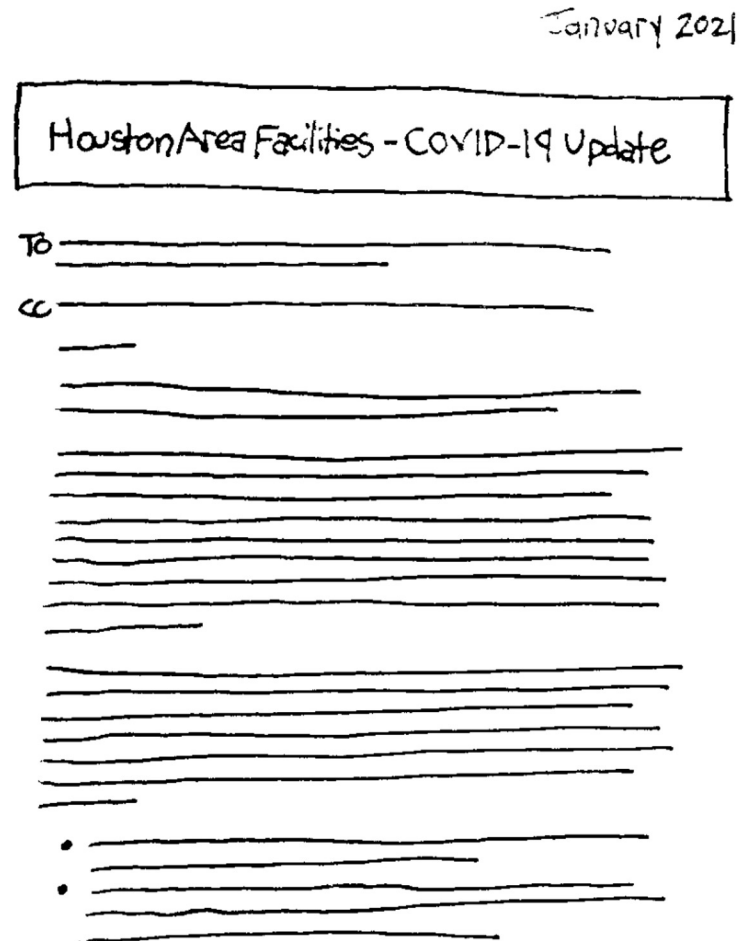
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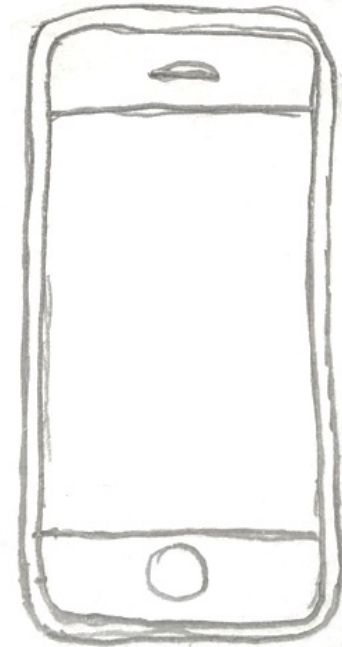
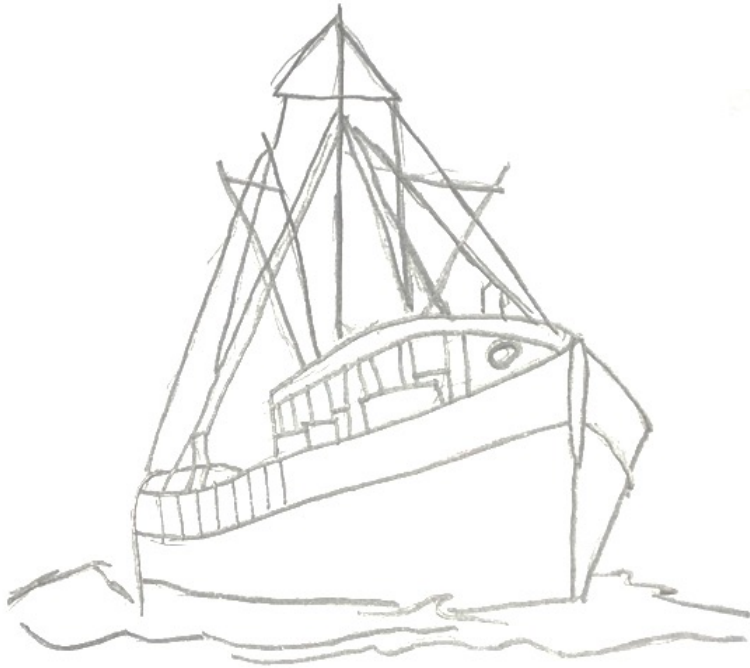
Get more people to read the email

Disasters create information vacuums. Communicate better to get facts to the people.



Some ideas are bad

Even if they're fully funded.



OFF YOU GO

Do No Harm

Disaster-impacted users have it hard enough.



Volunteer

Do No Harm

Disaster-impacted users have it hard enough.



Volunteer



Build relationships

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Volunteer



Build relationships



Identify
problems

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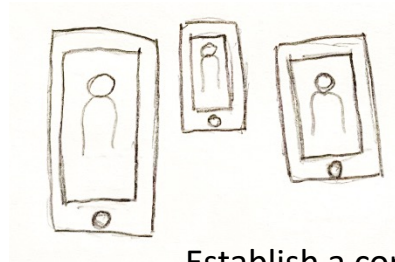
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Establish a core team

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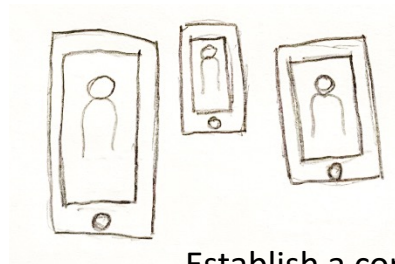
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Build relationships



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Establish a core team

What's the same

- Your design principles
- Rapid, frequent iteration
- Clear definition of user groups
- The importance of user research
- Limits to your capacity

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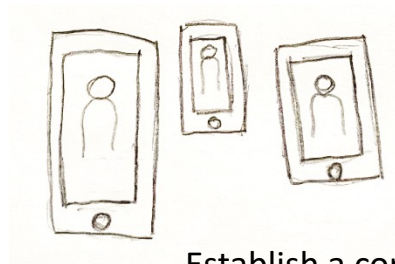
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What's different

- Communication with users (in-person or on the phone)
- No formal data collection (rely on participant observation and “chats” when appropriate)
- Designers will not be recruited
- Your feelings about the project and sense of urgency
- Be extra patient and extra gentle with people (including yourself)

In times of chaos, use design to create
clarity.

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Q&A • Comments

Or follow-up:
emily.j.danielson@exxonmobil.com