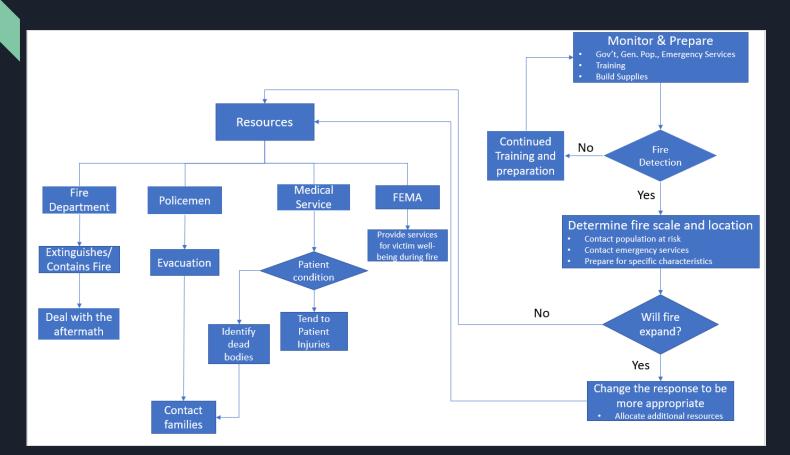
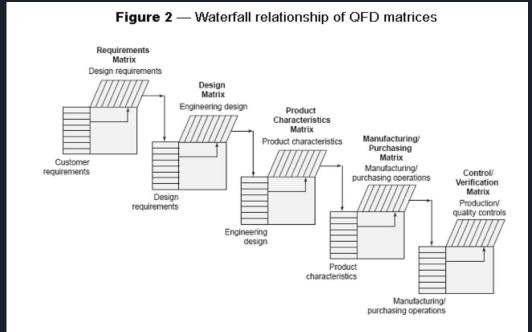
# Quality Function Deployment (QFD) Bushfire Mitigation

## Group 2 Kyle Shanahan Hongsen Wang Xinzhou Xia 2/21/2019

#### Flow Chart



Overview: Quality Function Diagram
Waterfall



Customer Requirements Design Requirements Engineering Design

Product Characteristics

#### **Customer Needs**

- Nurses & Doctors
- Temporary Shelter
- Food & Water
- Medicine
- Administration
- Transportation
- Recovery Assistance
- Fire Control

	Customer Needs								
	Nurses & Doctors	Temporary shelter	Food & Water	Medicine	Administration	Transportation	Recovery Assistance	Fire Control	
Effected Residents		9	9	1		9	9	9	
Non-residents (tourists, students)		9	9	1		9		5	
Patients	9		9	9		5		1	
Infrastructure					5	1	5	5	
Industry/Commerce					5	1	5	9	
Police Department			1		9	5	1		
Fire Department			1		9	9	1	9	
Healthcare Field	9	5	1	5	9	5	1	5	
FEMA	·	5	1		9	5	5		
	lon-residents (tourists, students) Patients Infrastructure Industry/Commerce Police Department Fire Department Healthcare Field	Effected Residents  Non-residents (tourists, students)  Patients 9  Infrastructure  Industry/Commerce  Police Department  Fire Department  Healthcare Field 9	Effected Residents   9   9   9   9   9   9   9   9   9	Effected Residents	Nurses & Doctors   Temporary shelter   Food & Water   Medicine	Nurses & Doctors         Temporary shelter         Food & Water         Medicine         Administration           Effected Residents         9         9         1           Ion-residents (tourists, students)         9         9         1           Patients         9         9         9           Infrastructure         5         5           Industry/Commerce         5         5           Police Department         1         9           Fire Department         1         9           Healthcare Field         9         5         1         5         9	Nurses & Doctors         Temporary shelter         Food & Water         Medicine         Administration         Transportation           Effected Residents         9         9         1         9           Ion-residents (tourists, students)         9         9         1         9           Patients         9         9         9         5           Infrastructure         5         1           Industry/Commerce         5         1           Police Department         1         9         5           Fire Department         1         9         9           Healthcare Field         9         5         1         5         9         5	Nurses & Doctors         Temporary shelter         Food & Water         Medicine         Administration         Transportation         Recovery Assistance           Effected Residents         9         9         1         9         1         5         1         5         1         5         1         5         1         5         1         1         9         9         1         1         9	

Customer Requirements Design Requirements Engineering Design

Product Characteristics

#### Product Design

- Training
- Procedures
- Planners
- Proper Equipment
- Reports/Data
- Facilities/Offices
- Funding

	Product Features								
		Training	Procedures	Planners	Proper Equipment	Reports/Data	Facilities/Offices	Funding	
Customer Needs	Nurses & Doctors	9	9		9	9	5	9	
	Temporary Shelter				5		9	9	
	Food & Water				5		5	9	
	Medicine					5		9	
	Administration	9	9	9	5	9	5		
	Transportation				5		9	9	
	Recovery Assistance			5	5		5	9	
	Fire Control	9	9	5	9			9	

Customer Requirements

Design Requirements Engineering Design

Product Characteristics

#### Process Design

- Budgeting
- Engineering/Manufacturing
- Process Flow Chart
- Surveys
- Inspections
- Controlling/Planning
- Communication PLan

		Process Features								
		Budgeting	Engineering/ Manufacturing	Process Flow Chart	Surveys	Inspections	Controlling/ Planning	Communication Plan		
Product Features	Training	5		9	1	1	9	9		
	Procedures	1		9	5	9	9	9		
	Planners	5		9	9	9	9	1		
	Proper Equipment	9	9			5	5			
	Reports/Data			5	9	9	5			
	Facilities/Offices	5	5				5	1		
	Funding	9		5	9		1	5		

Customer Requirements Design Requirements Engineering Design

Product Characteristics

#### Process Control Features

- QFD
- Timeline
- Real-time Surveillance
- Data Analysis
- System Engineering
- Process Capability Analysis
- Discussion
- Education
- Review

		Process Control								
		Quality Function Deployment	Timeline	Real-time Surveillance	Data Analysis	System Engineering	Process Capability Analysis	Discussion	Education	Review
Process Features	Budgeting		1	5	9		5	9	1	9
	Engineering/Manufacturing	9	1	5		9	5	5	9	1
	Process Flow Chart		9	5		1		9	1	9
	Surveys	5		1	9		5			1
	Inspections	5		1		1	5		5	5
	Controlling/Planning	9	9	9	5	9	5	9	5	9
	Communication Plan							5	1	5

Customer Requirements

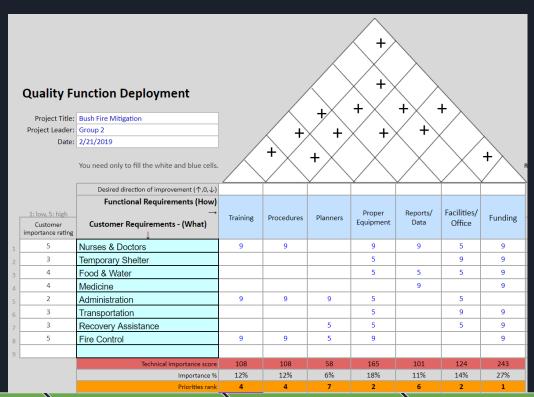
Design Requirements Engineering Design

Product Characteristics

#### House of Quality

#### **PRIORITIES**

- Funding
- Proper Equipment
- Facilities/Office
- Training
- Procedures

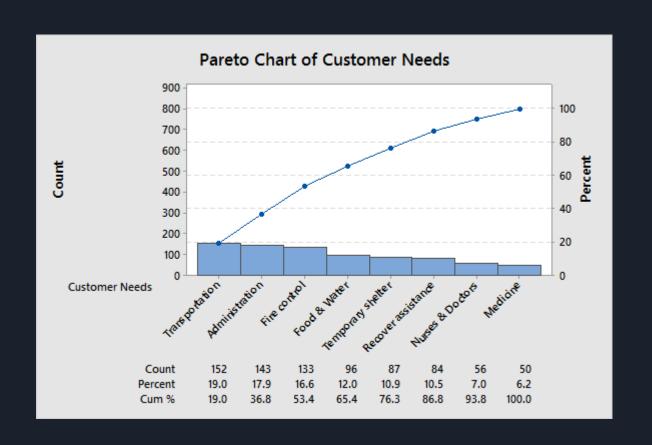


Customer Requirements

Design Requirements Engineering Design

Product Characteristics

#### Measurement Tool-Pareto Chart



### Questions?