

### Building a Meaningful Disaster Preparedness App & the Associated Data Challenges

CITY OF PLANO

BUSINESS INTELLIGENCE/GEOGRAPHIC INFORMATION SYSTEMS



#### WHO AM !?

#### Maya Shaw

Business Intelligence/GIS Analyst II
Technology Solutions Department
City of Plano

- BA in Geography from Rutgers
- GIS for about 16 years
- With Plano for 1 year
- Currently been building an web app for the EM Department





# JOURNEY INTO THE LAND OF EMERGENCY MANAGEMENT

- Assigned a project on updating the Hazard Mitigation Action Plan (HMAP) for EM in February 2022
- Tour/work at the EOC
- Began building an interactive web application for disaster readiness & response
- Started to dig into EM datasets and asked the "Accuracy" question (eye roll)





## TIER II FACILITIES

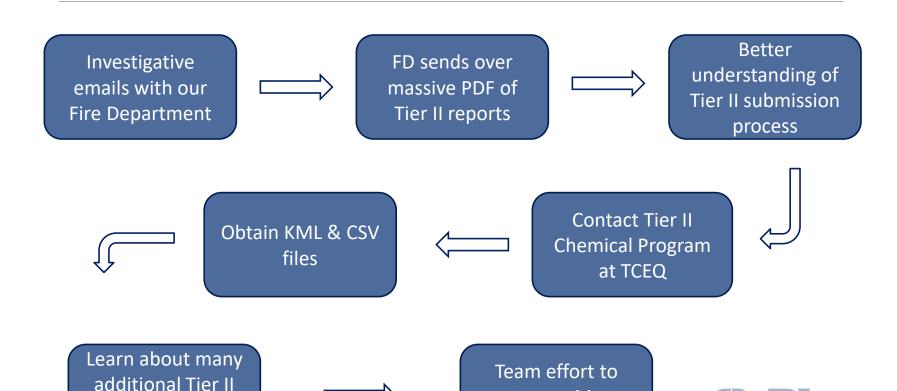
## Facilities that have hazardous chemicals onsite and are required to report them to the TCEQ

- When was the data last updated?
- How do we get more updated and complete data?
- How do we get it in an usable format for GIS?
- How do we verify its accuracy once we do get it?





# THE (DETAILED) PATH TO BETTER HAZMAT DATA



DECEMBER 14, 2022

tables beyond

**Facilities** 

create one Master

Table

Plano

City of Excellence

# NEXT CHALLENGE: CRITICAL LOAD

#### All sites/facilities that take priority for power restoration

- Where did this data come from?
- How do we get more updated data?
- How do we make it more clear and usable?





### FINALLY: SCHOOLS

#### 3 separate layers – needed only one, more robust layer!

- Outdated information
- Very different schema
- Needed more types of schools





#### EM INTERACTIVE TOOL

# Let's go check it out!



## QUESTIONS?

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Maya Shaw
Passionate about maps, demographics, and fresh perspectives!



