
STORYTELLING WITH DATA

DASHBOARDS

North Region Unit Sales by City

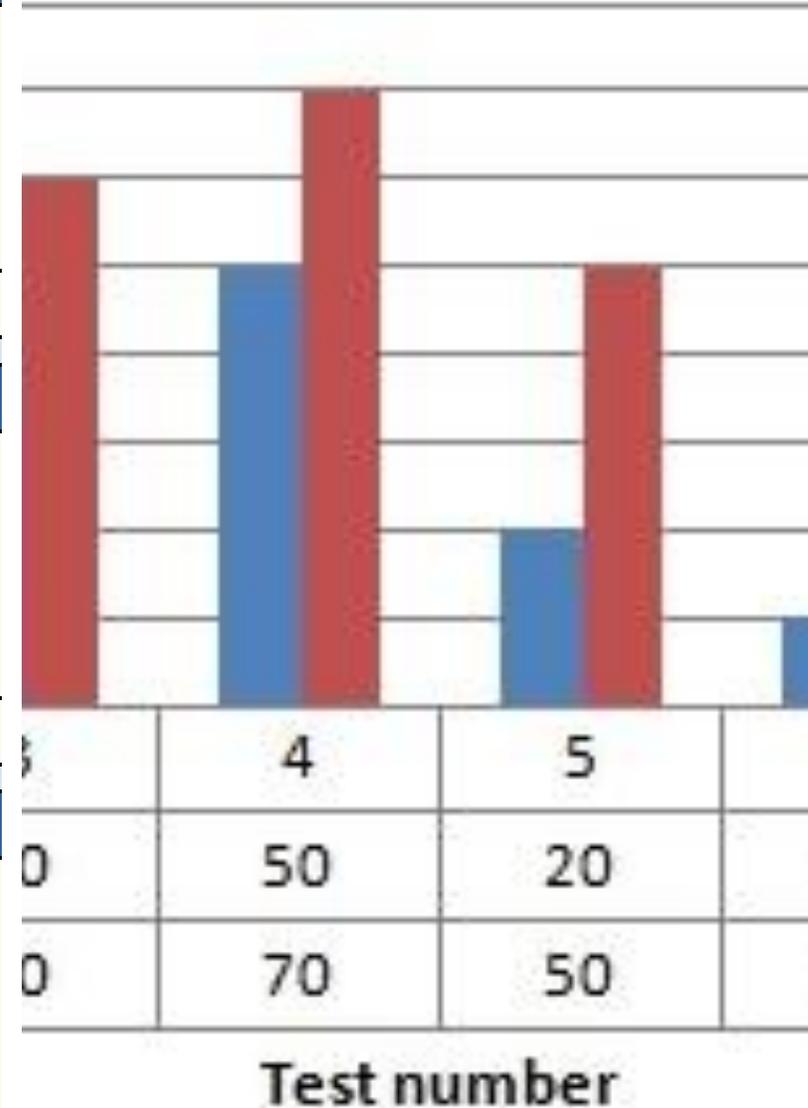
Region	Jan-00	Feb-00	Mar-00	Apr-00	May-00
Actuals					
Littleton	111	653	1,598	3,411	3,972
Denver	27,867	29,153	30,557	33,402	35,219
Windsor	33,078	34,401	37,535	39,916	41,357
W. Kane	25,417	26,669	28,092	29,020	29,674
North Region	199,841	211,053	226,789	242,957	256,605
Plan					
Littleton	383	2,205	2,205	2,205	2,205
Denver	29,525	26,062	27,088	28,289	29,536
Windsor	32,276	34,055	36,737	39,557	41,066
W. Kane	203,916	216,724	230,474	246,390	261,799
North Region	8,057	7,137	10,265	12,483	10,215

OVERVIEW

The past is **data-driven**:

- mostly Excel (or reporting tools like Cognos)
- mostly numbers, tables and non-interactive graphs
- distributed on desktop computers, by email, in PowerPoint presentation
- static, mostly backwards looking (lagging indicators)
- KPIs and dashboards were somewhat contrived

Chart with Data Table

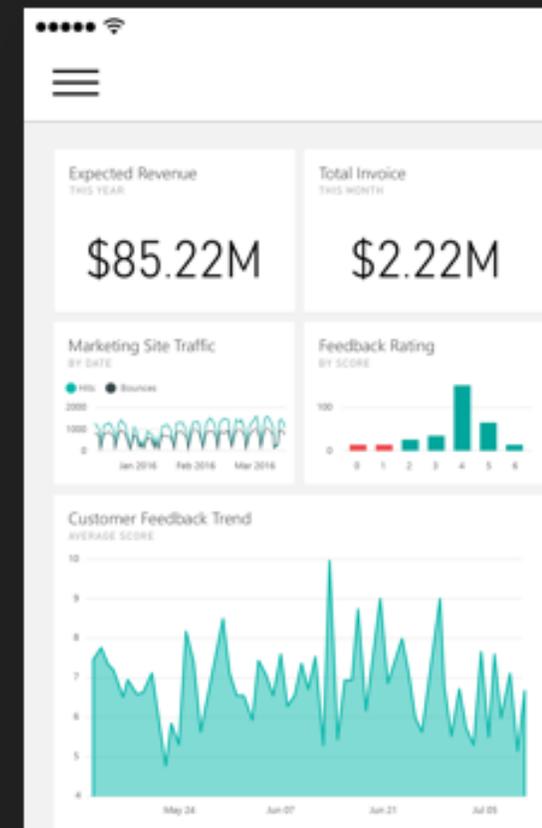
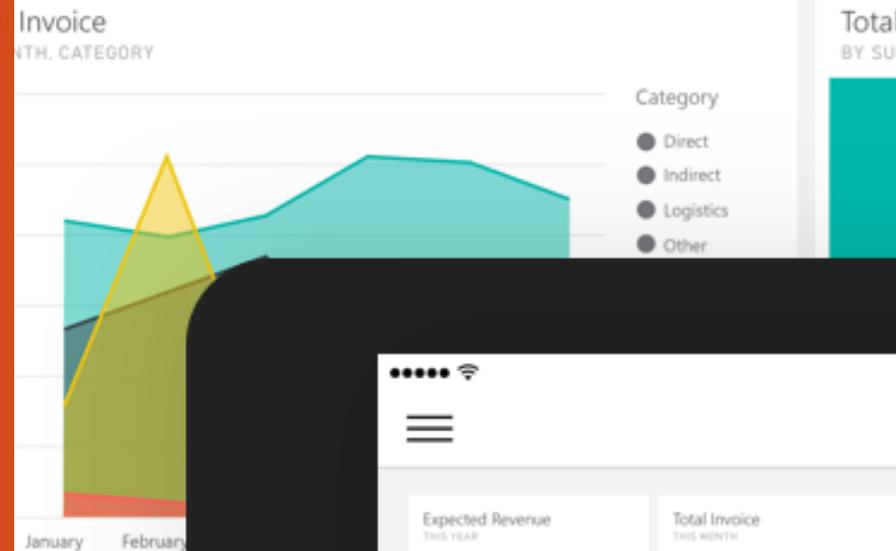




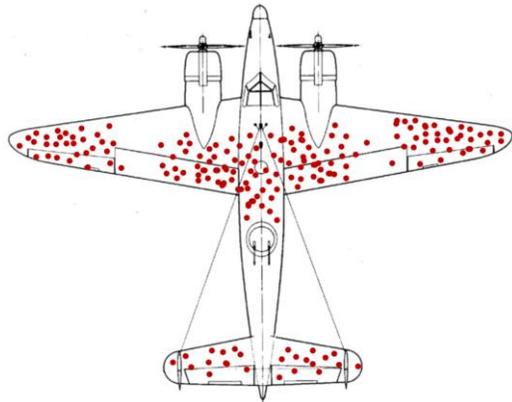
OVERVIEW

The future is **story-driven**:

- new tools: Power BI, Tableau, Qlickview, Shiny, etc.
- mostly visualizations, occasional numbers and tables
- distributed on the web (internal and external)
- dynamic and both backwards and forwards looking (leading and lagging indicators)
- data for everyone

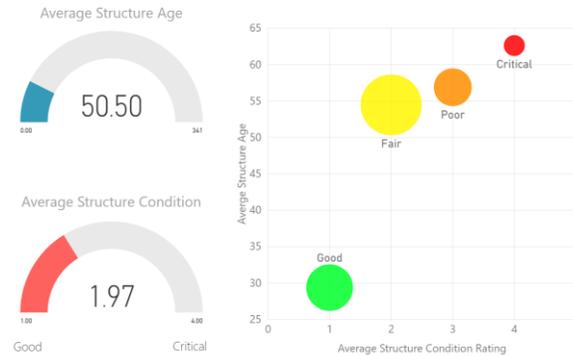


DEFINING CONTEXT



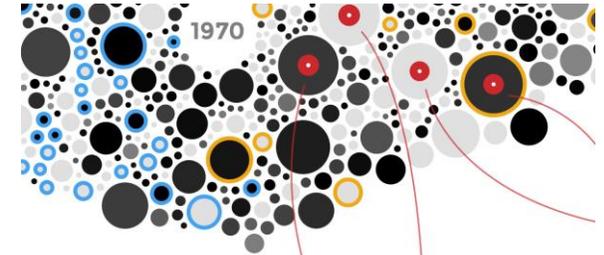
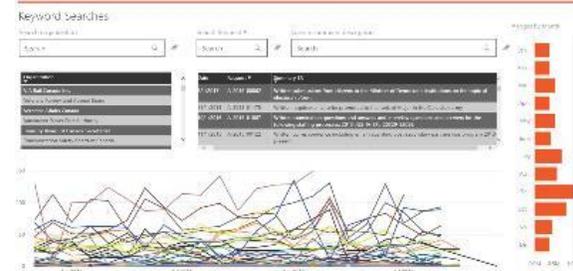
Directory of Federal Real Property (DFRP) Dashboard

You have selected 20,186 properties that contain 35,148 structures



Access to Information and Privacy (ATIP) search

You have currently selected 28,711 requests totaling 6,597,612 pages of information



The Beatles

No other artist or band has more songs in the Top 2000 as the Beatles. With 38 songs they are responsible for 14% of all titles before 1970. Nonetheless, only 5 years ago they still had 50 songs in the list.

- 4 Piano Man
Billy Joel | 1974
- 5 Child in Time
Deep Purple | 1972

Seconds

Minutes

Fraction of Hour

Hours

Infographics/Data Viz

Dashboards

Reports and Exploration

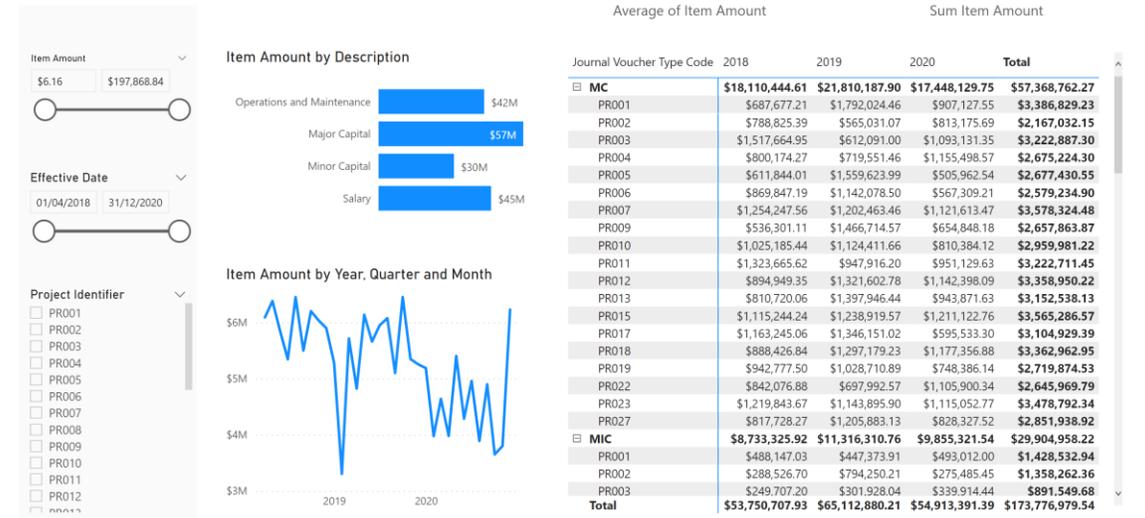
Data Art

DASHBOARD TYPES

Exploration: using visualizations as a tool to explore/understand the data

- high level of interactivity
- high level of detail
- **all** aspects of data should be represented (tables, columns, calculations etc.)
- no annotations or explanations required

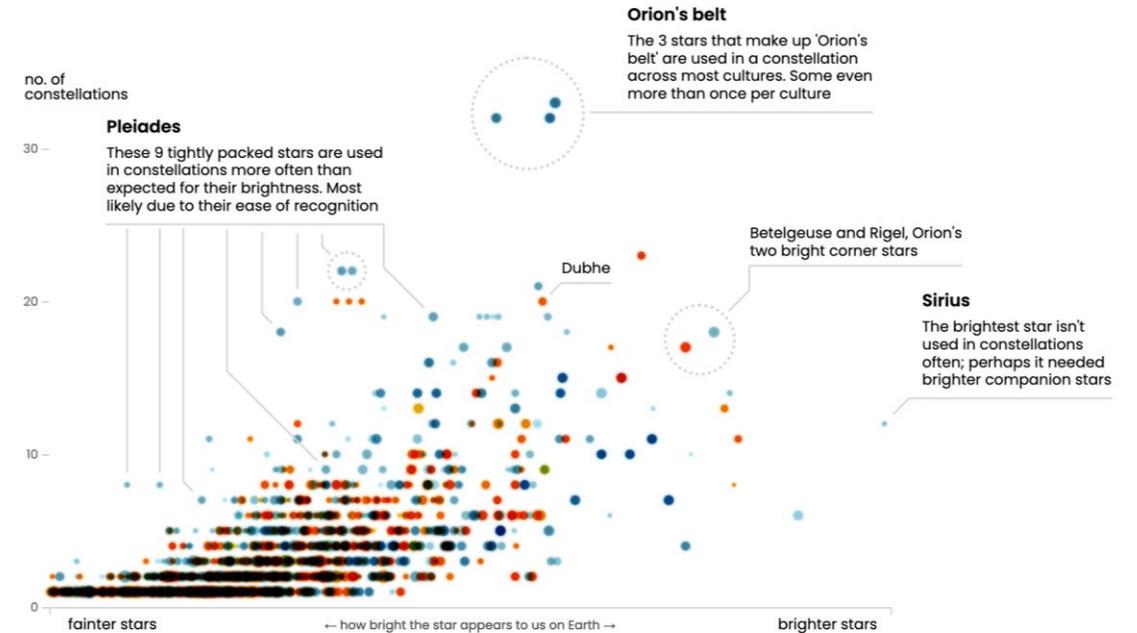
Financial Data Exploration



DASHBOARD TYPES

Storybook: using visualizations as a tool to explain the data and communicate the story

- low level of interactivity
- low level of detail
- key aspects of data should be represented
- annotations and explanations drive the “story”

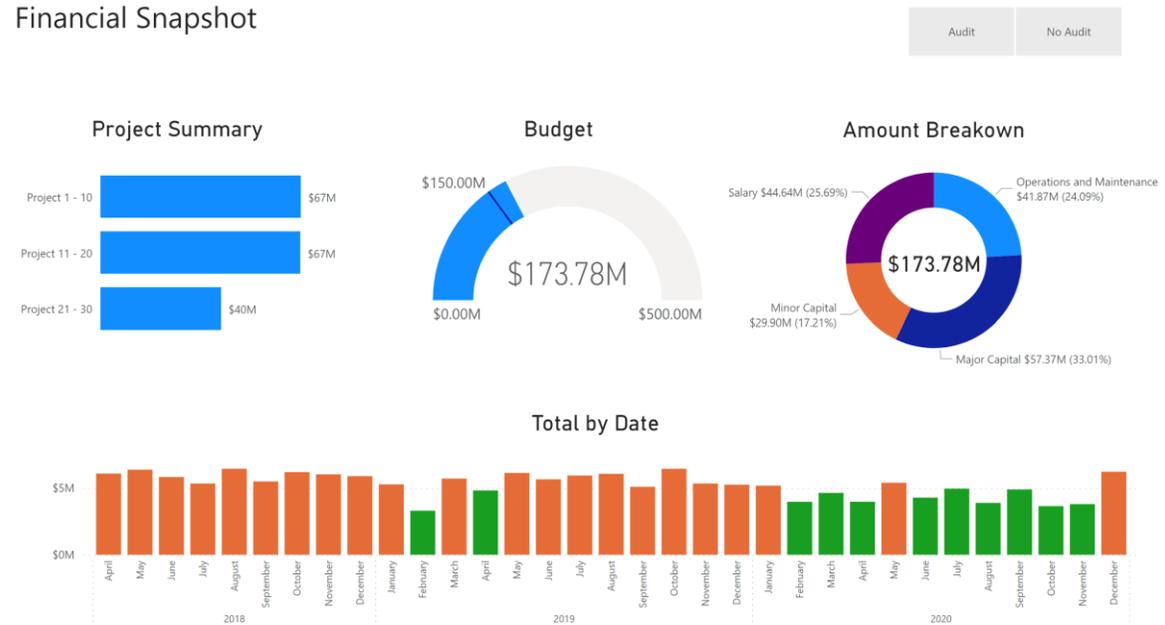


DASHBOARD TYPES

Situational Awareness: using visualizations as a tool to provide a snapshot of the data

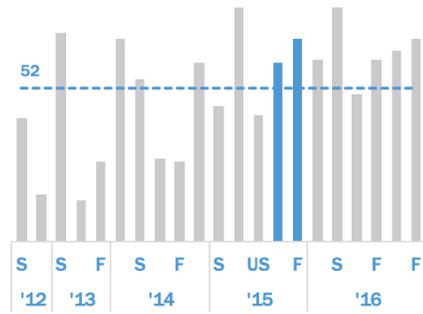
- medium level of interactivity
- not “scripted” but well organized (e.g., categorized)
- summary data should be represented
- anomalies are highlighted
- often used for internal presentations

Financial Snapshot



Course Metrics

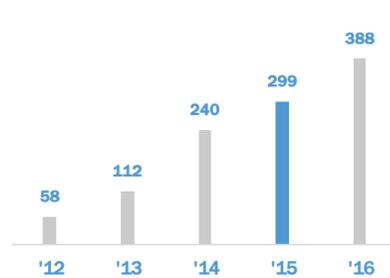
Students



1097

Total Students in five years

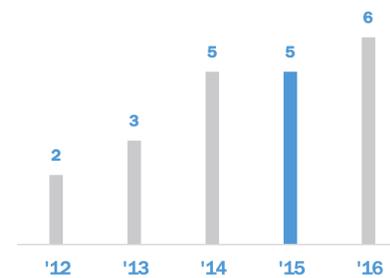
Enrollments



687

Total Students in 2015-2016

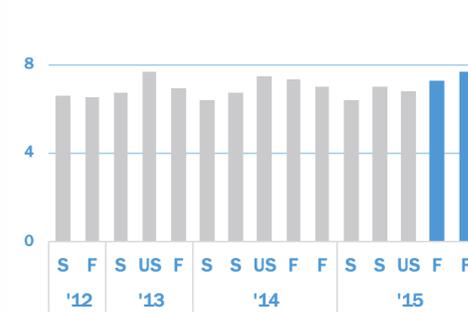
Classes



21

Total Classes in five years

Ratings



7.7 of 8

Most recent instructor rating (out of 8.0)

Semesters

2015 Fall Semester 001

Questions

- I developed specific skills and competencies
- Overall, this was an excellent course
- The instructor communicated clearly
- The Instructor graded fairly
- The instructor was well organized
- The instructor interacted well with students
- Overall, this instructor was excellent

2015 Fall Semester 002

- I developed specific skills and competencies
- Overall, this was an excellent course
- The instructor communicated clearly
- The Instructor graded fairly
- The instructor was well organized
- The instructor interacted well with students
- Overall, this instructor was excellent

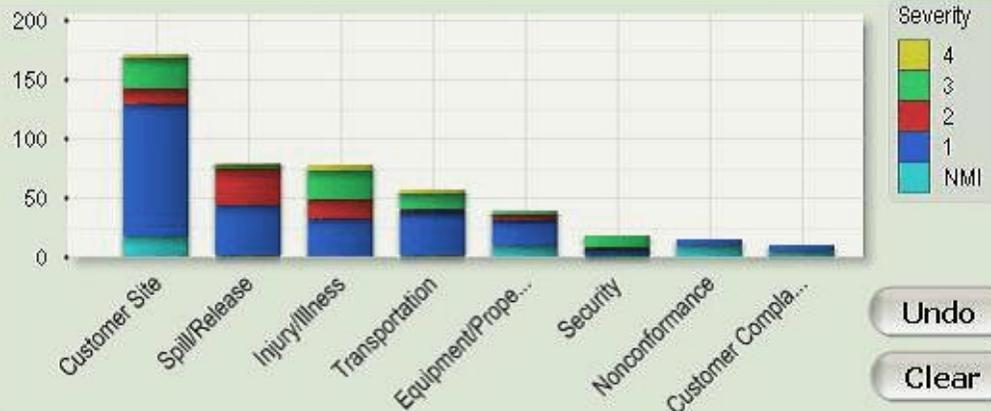
● BANA | College ● Shaffer

Ratings

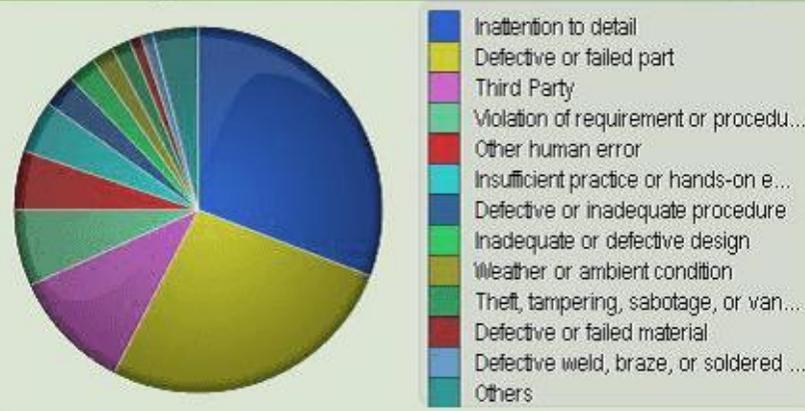


Synchronized Data Views: Drill-Down by Category, Severity, Cause, Site, Time, Status

Incidents by Category & Severity



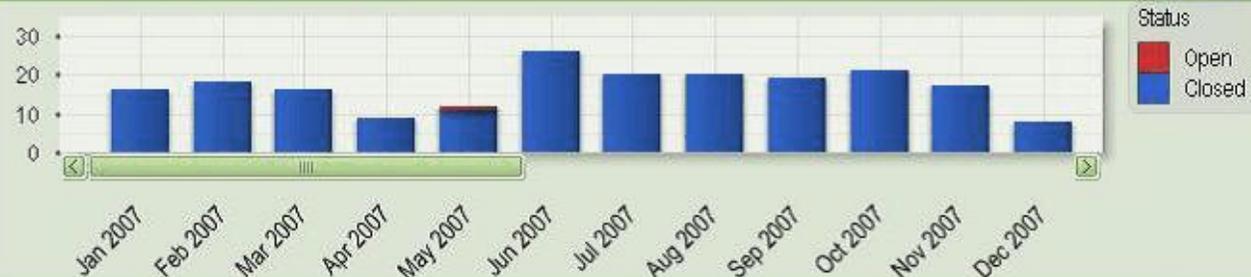
Contributing Cause



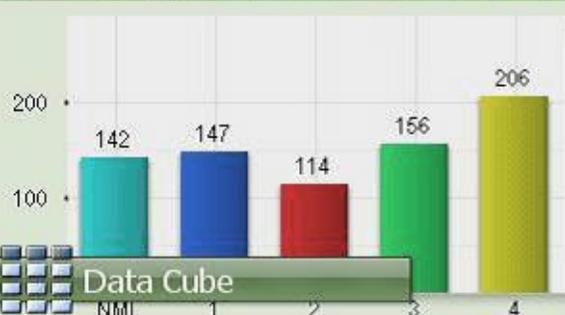
Root Cause



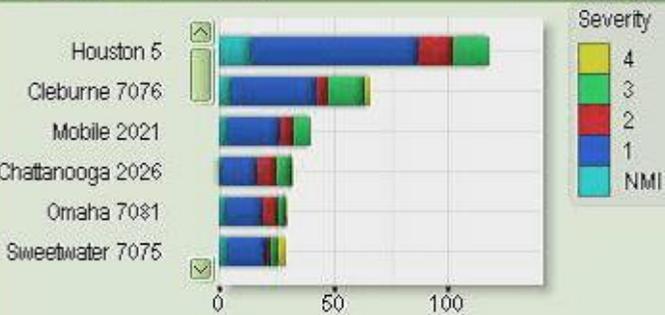
Incident Trends and their Status



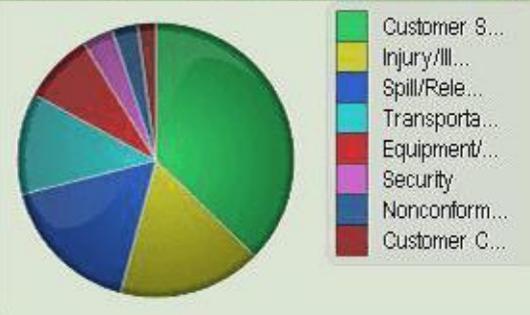
Incidents Severity, by ...



Incidents by Facility



Incidents By Categor...





STORYTELLING WITH DATA

DASHBOARDS