



# Nuclear Safety Information (NSI) and Corporate Safety Performance Dashboards Presentation for the DOE ERAD

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August 29, 2018





# DOE Mission Requires...

- DOE contractors work with the world's most dangerous materials:
  - Nuclear, radiological
  - Biological, chemical carcinogens
  - Highly hazardous wastes: nuclear, radiological and mixed wastes
- DOE/Taxpayer fully indemnifies contractors from liability
  - \$160B for cleanup since 1990 (EM FY16 budget \$6.3B)
  - \$500B projection for cleanup
- Additional special legislation to address ES&H concerns
  - \$15.5B paid health claims for beryllium, radiation, etc. (\$13.5B illness, \$2B rad)
- ES&H Information databases support DOE management decisions:
  - Provides monitoring alert system
  - Provides DOE with operational awareness and knowledge of activities
  - Provides ES&H information for trending



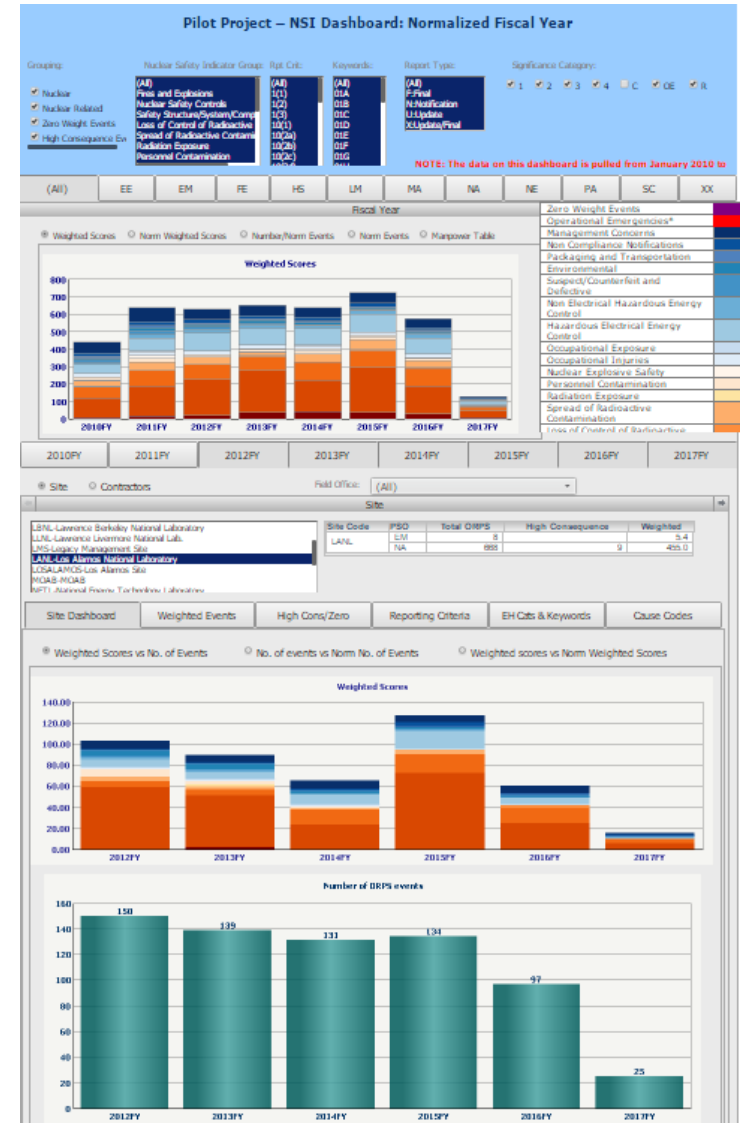
## DOE ES&H Databases: AU-23 Manages Major DOE-Wide ES&H Databases and Provides Expert Information and Support to Department Managers

- ORPS: Major nuclear & non-nuclear events
- CAIRS: Injury database (major ES&H performance indicator)
- REMS: Radiation exposure
- ASER: Public radiation exposures, environmental releases, waste production and management
- Dashboards: Facilitate the ease of use of data



# Goal: Nuclear Safety Information (NSI) Dashboard

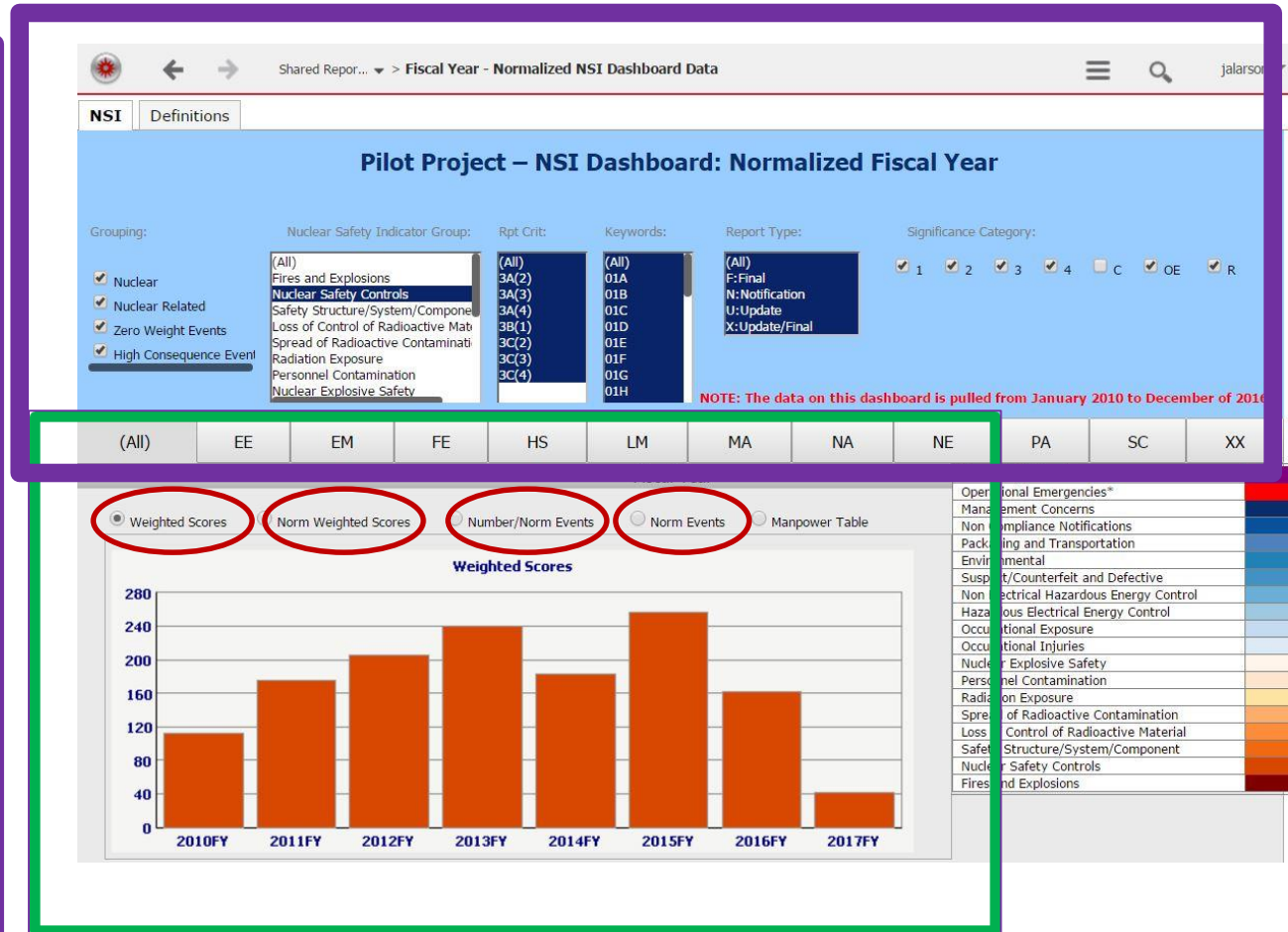
- **Goal:** Facilitate use of the DOE ORPS database for quicker and more in-depth analysis and trending of nuclear safety information for PSO and sites.
- NSI **extracts** ORPS nuclear safety data to eliminate time consuming searches.
- NSI **displays** data in trending/analytical graphic format. Easily accessible and usable.
- Nuclear safety precursor-type events are **weighted** and grouped, and weighted categories are presented by PSOs and sites.





# Sorting Functions Include...

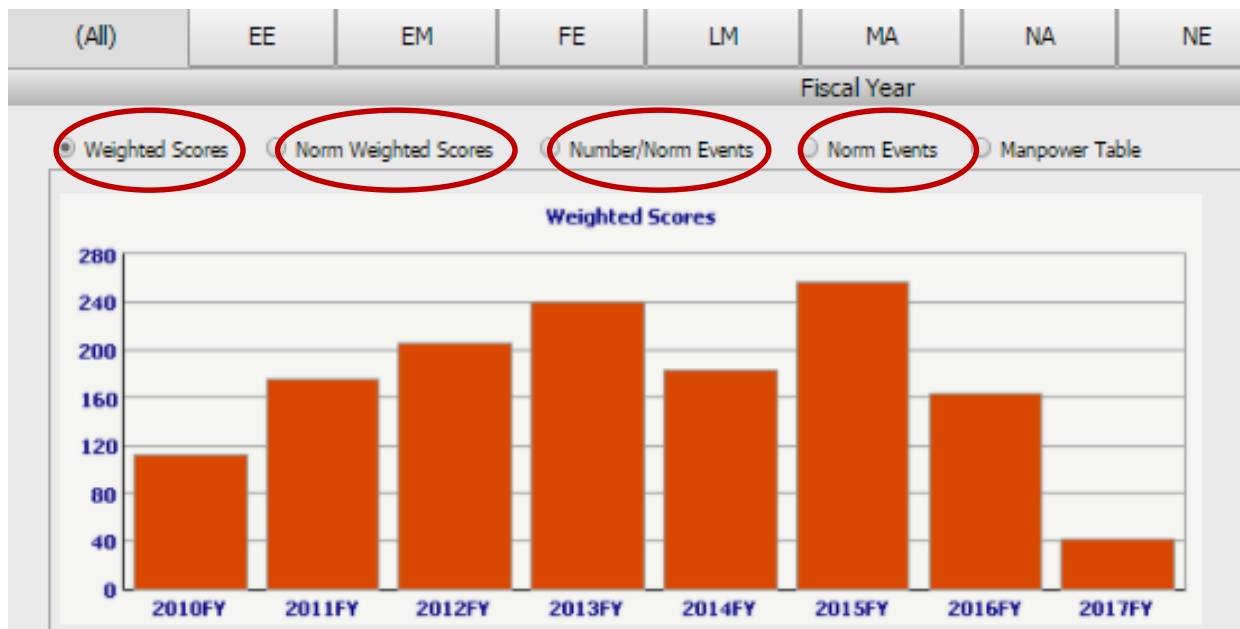
- Reporting Criteria
- Keywords
- Significance Category
- Year/Quarterly
- PSOs
- Indicator Groups
- Total Events
- High Consequence Events
- Dual Charts





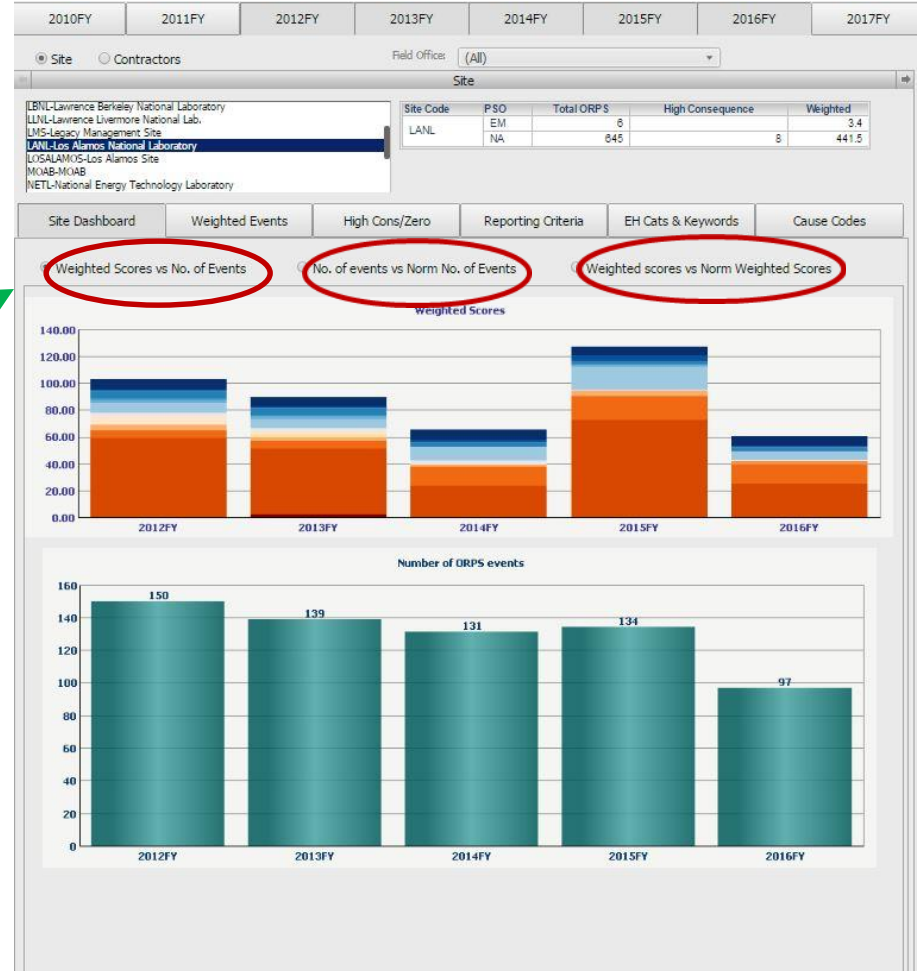
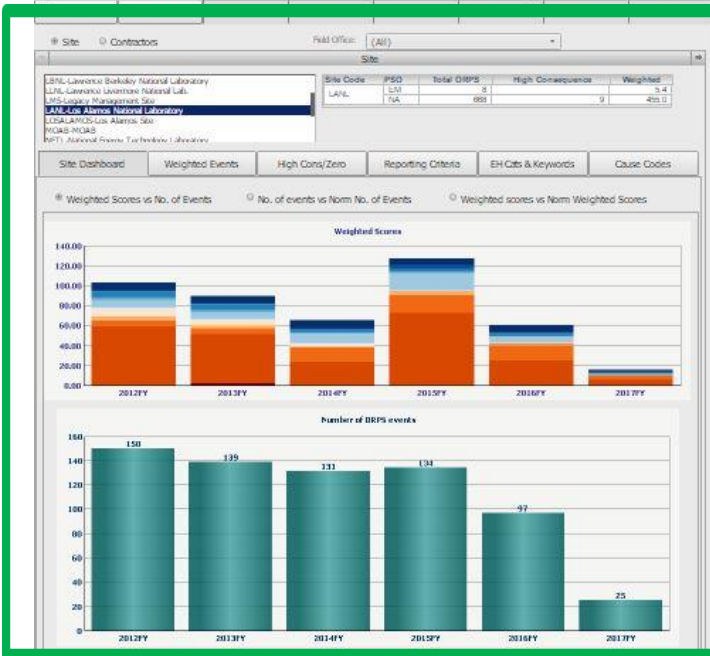
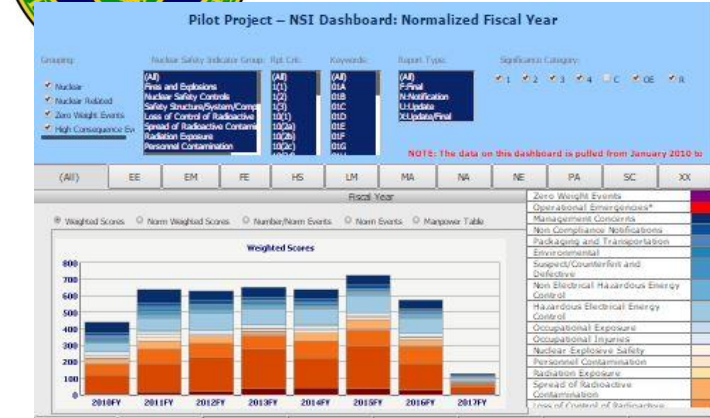
## NSI features **Four Vantage Points** from same sorted ORPS Information

1. Weighted scoring of precursor-type ORPS events.
2. Weighted scoring, normalized to manpower (per/1K.)
3. Total number of ORPS events.
4. Total events, normalized to manpower.





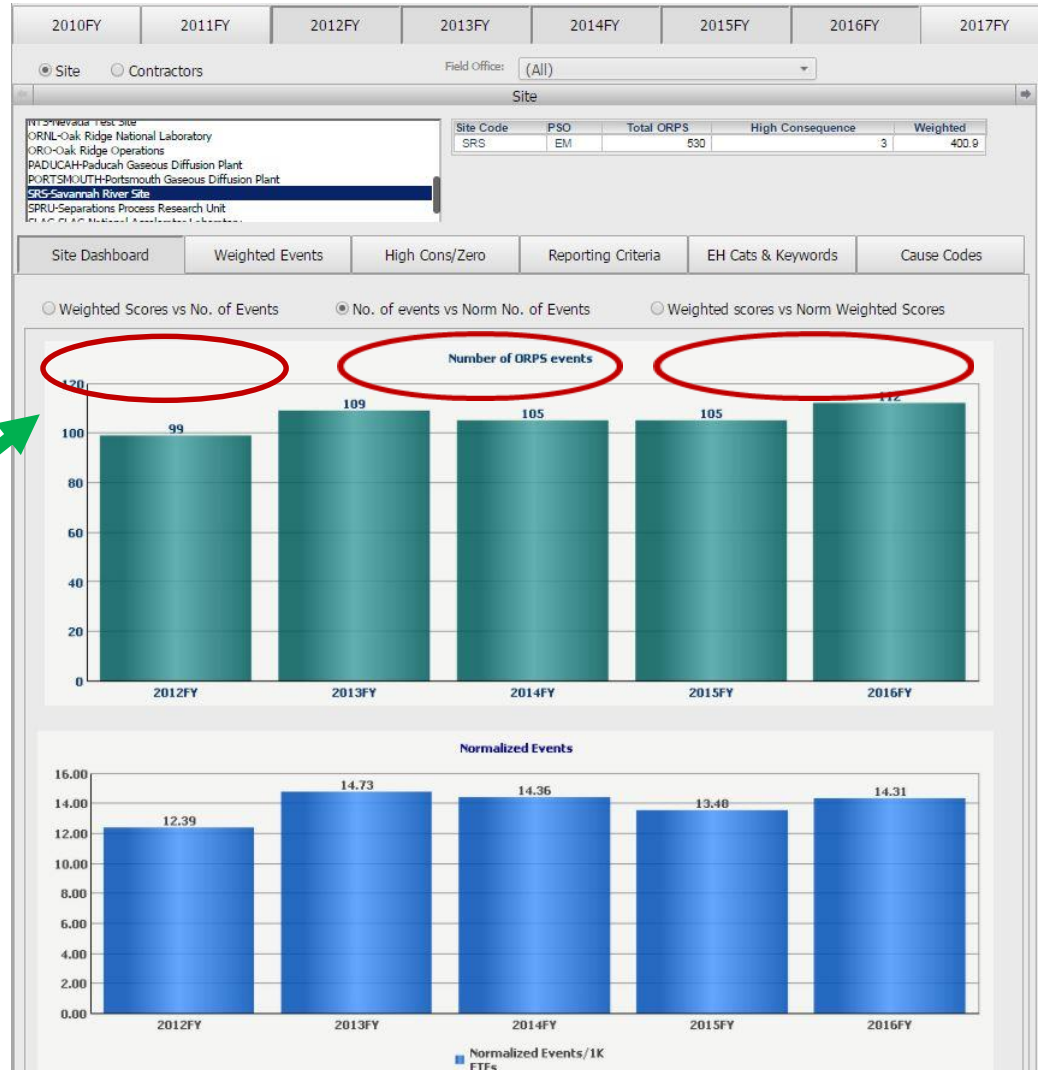
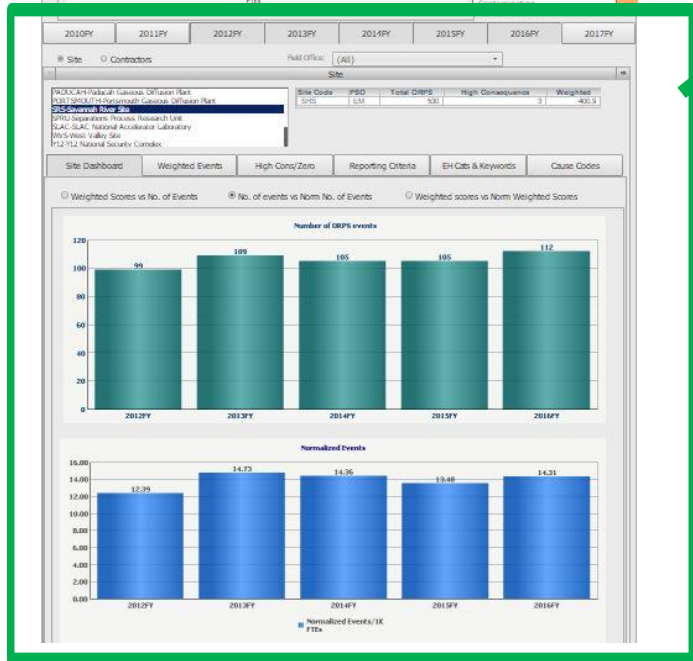
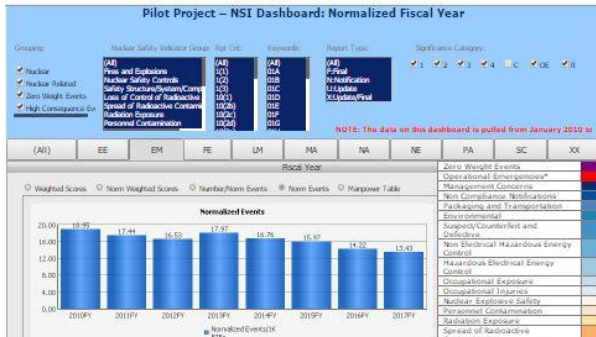
# Site Specific Events







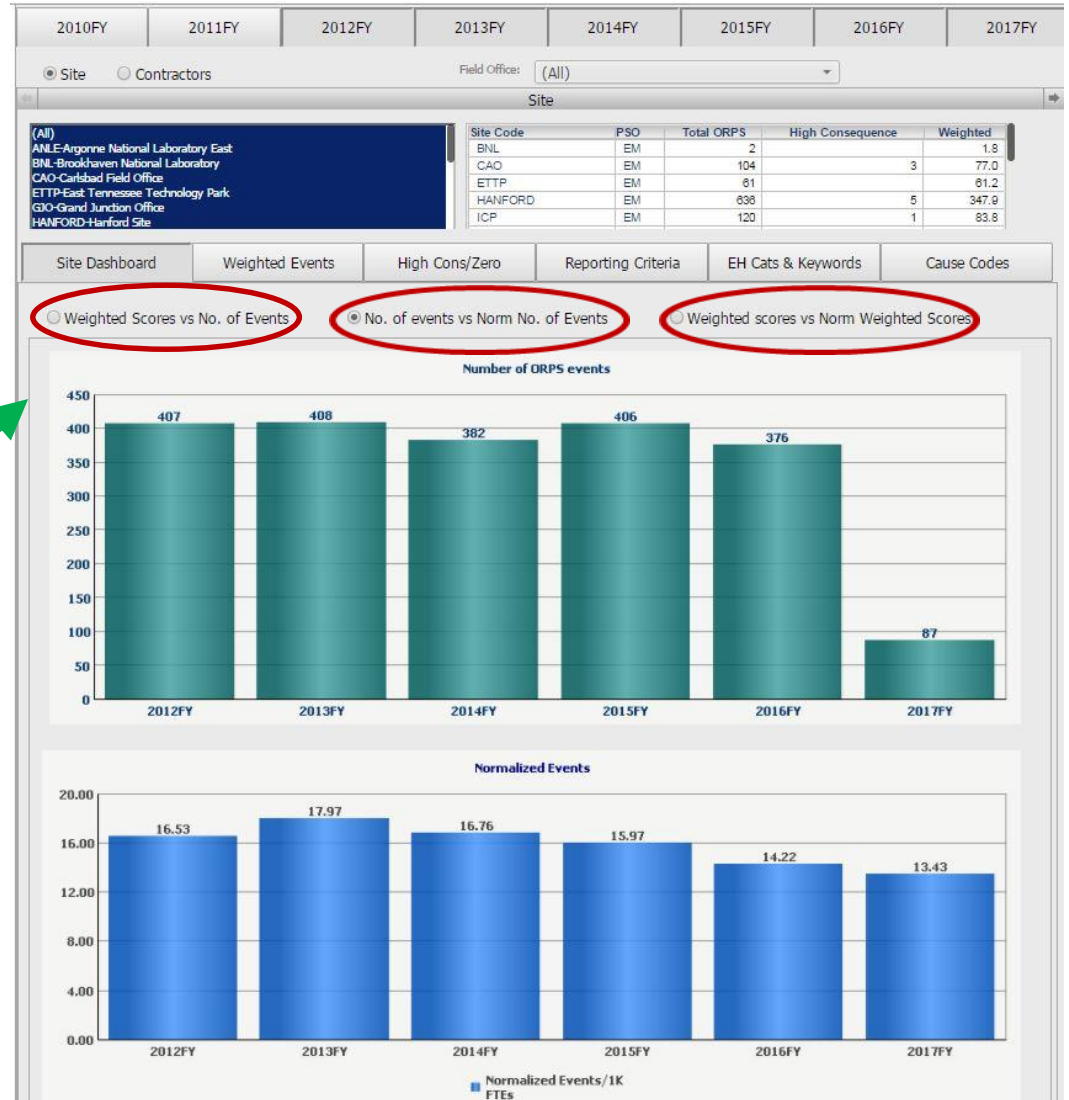
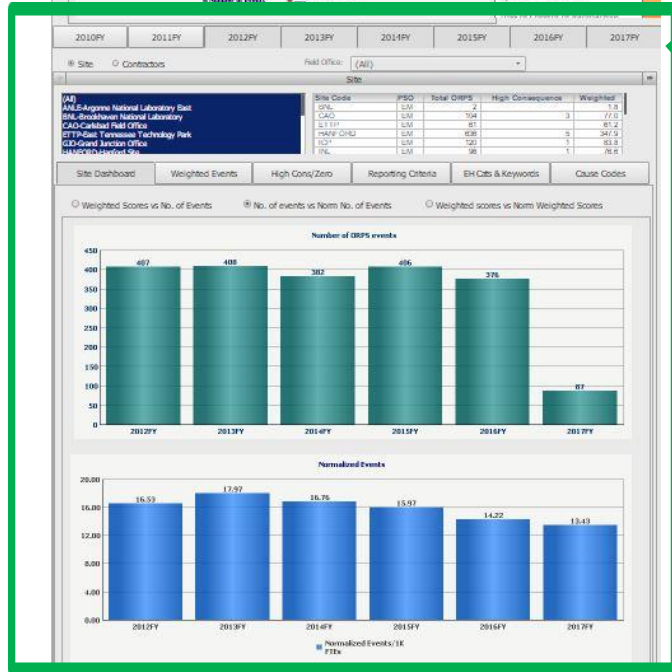
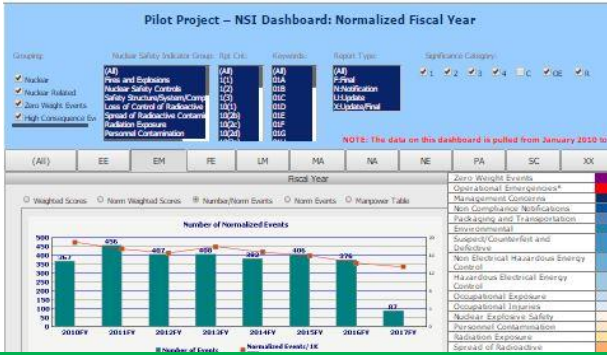
# Normalization: Site Specific Events





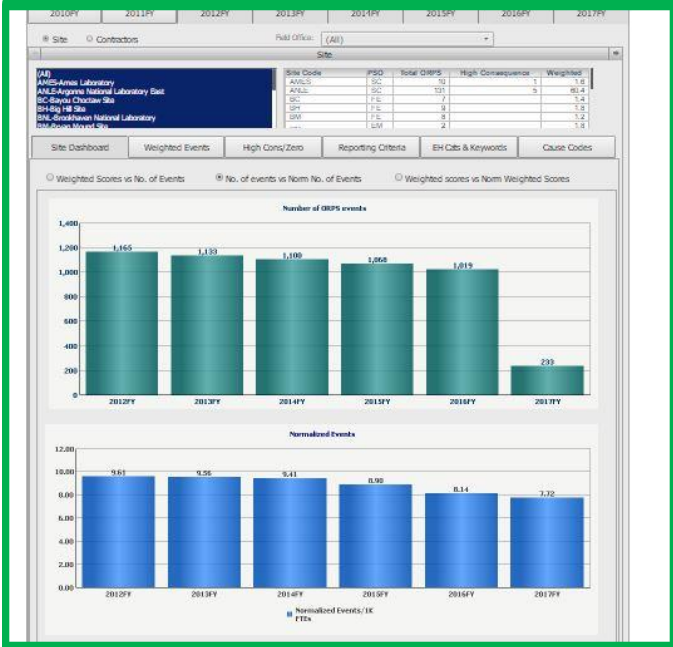
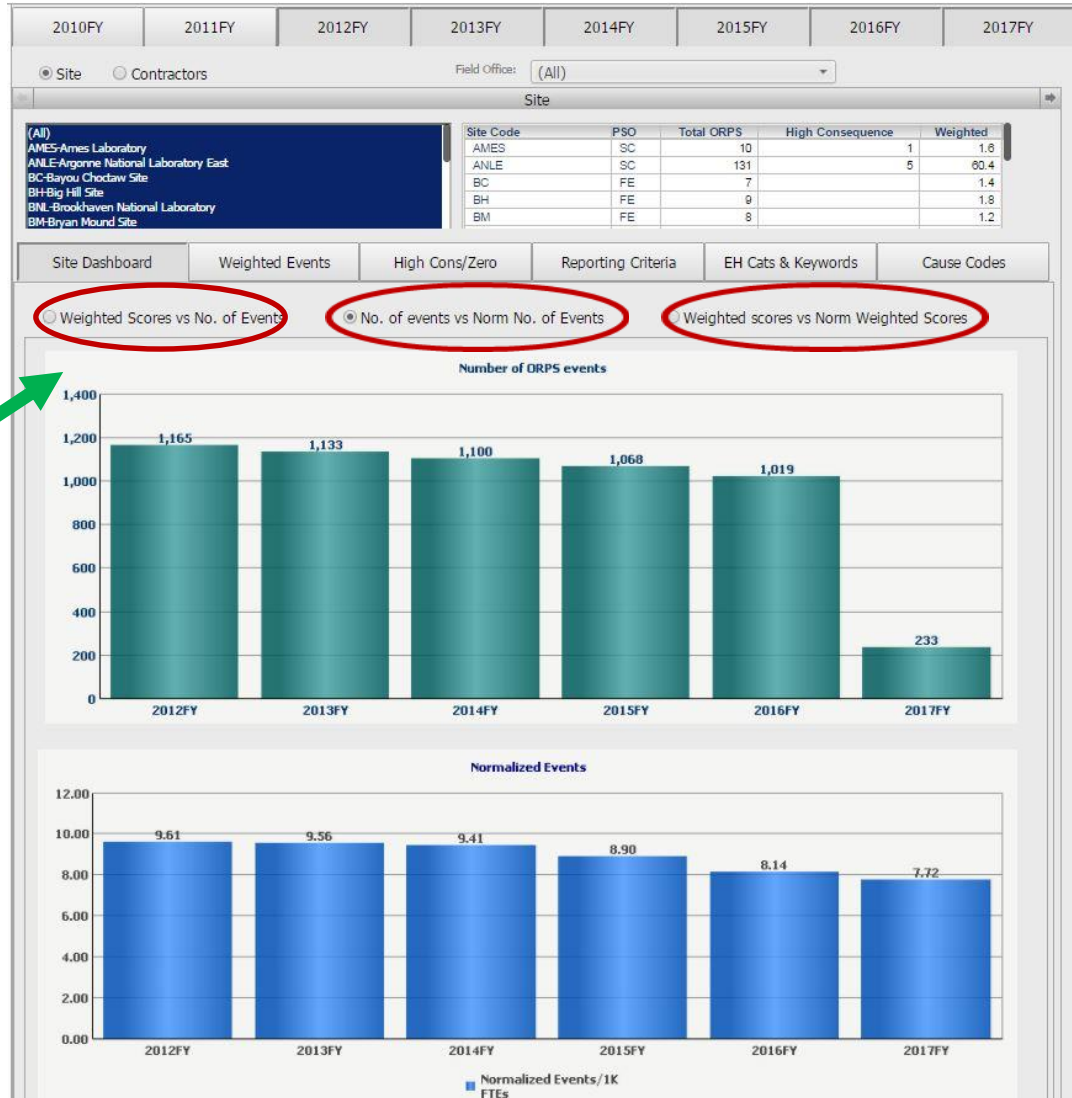
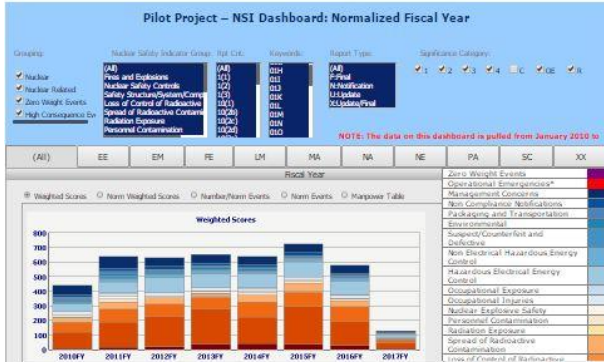


# Normalization: PSO Events



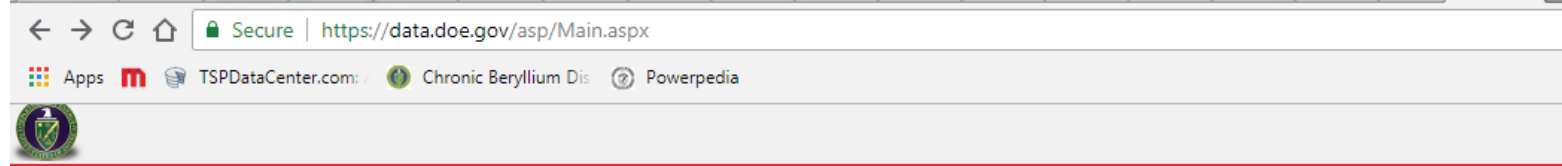


# Normalization: DOE-wide Events





# Opening Web Page for CSP & NSI



### Injury and Illness Dashboard

This tool allows users to easily explore DOE occupational safety and health injury and illness information. Users must have an active CAIRS account to login.



### Real Time: Nuclear Safety Information (NSI) Dashboard – Pilot Project

This NSI Dashboard provides the latest up-to-the-minute data in real time. Users need a single active ORPS account for all normalized and real time Dashboards (contact the Helpline at 800-473-4375 for a User Name and Password.)



### Normalized: Nuclear Safety Information (NSI) Dashboard – Pilot Project

This link brings you to three normalized NSI Dashboards: (1) Fiscal Year data, (2) Calendar Year data, and (3) Quarterly data. Users need a single active ORPS account for all normalized and real time Dashboards (contact the Helpline at 800-473-4375)



### Final ORPS - 232.2A

Final Occurrence Report



### Real Time: Nuclear Safety Information (NSI) Dashboard – Pilot: 2018+

This NSI Dashboard set provides the latest up-to-the-minute data in real time for (1) Fiscal Year, (2) Calendar Year, and (3) Quarterly. (Contact the Helpline at 800-473-4375 for a User Name and Password.)



### CSP Dashboard

Corporate Safety Dashboard

\*\*WARNING\*\*WARNING\*\*WARNING\*\*WARNING\*\*

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# NSI 2018+ and CSP Dashboards

