

Save Lives
Reduce
Claims
Mitigate Litigation
PREVENT
Injuries
manage risk
Increase
Stakeholder
VALUE
Enhance
Your Brand



Public Safety Trends and Culver Public Safety Index

Darcy Newton

Kate Leese

2018 Regional UPSA Meetings

© 2018 Culver Company LLC. All Rights Reserved. This document contains information that is proprietary and confidential.

Agenda

- About Culver Company
- Prevention-based Strategy
- Risk Gaps and Associated Costs
- Insurance Gaps
- Direct and Indirect Costs
- Benefits of a Robust Safety Culture Program
- Moving Forward
- Safety Index
- Providing Solutions at Every Level

Culver is Uniquely Qualified to Provide Insights on Utility Public Safety Strategy and Tactics

Our Heritage: Utility public safety strategists for **41 years**

Our Offering: Strategic planning for utility public safety outreach

- Litigation and regulatory support
- Public safety risk assessment and tactical solutions to fill gaps
- Risk management reporting
- Behavior change experts
- Program design, implementation, evaluation, and refinement
- Primary research on program effectiveness (national benchmarks and company baseline)

Our Expertise:

- Providing public safety programs, data, and services in 50 states and Canada
- Serving approximately 700 utilities annually
- Preparing for AEGIS, NTSB, PHMSA, FERC and state and local regulators

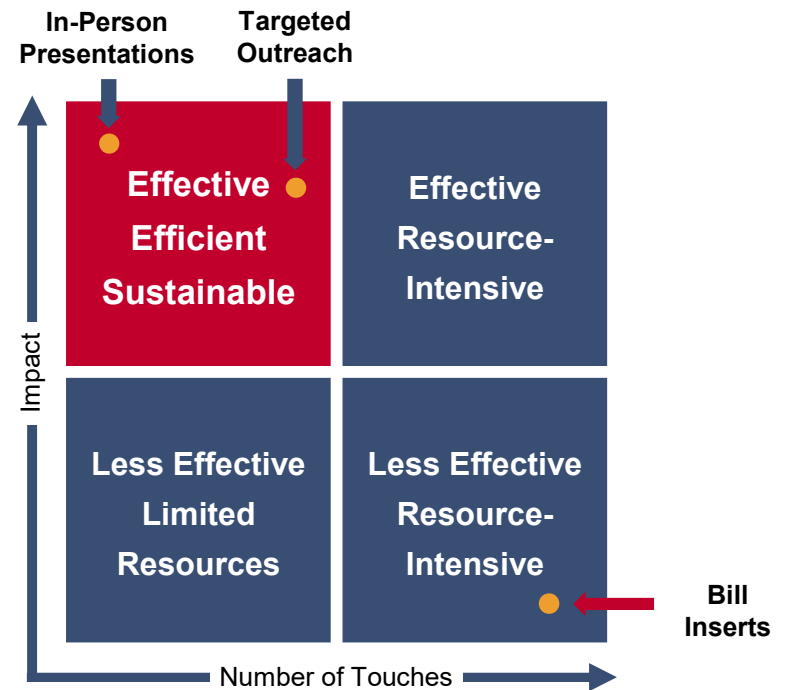
PREVENTION-BASED STRATEGY

Culver's Outreach Programs Promote Public Safety by Driving Behavioral and Culture Change

A prevention-based strategy increases engagement, awareness and safe behaviors among affected audiences.



Strategic Framework for Decision Making



Risk Process Gaps are Driving Unpredicted Risk



Issues

- 1 in 4 utilities report having had a “recent risk surprise”
- Nearly 60% do not require a risk analysis to determine an acceptable resilience / recovery level
- 2 out of 3 companies did not define when a risk issue needed to be escalated



Insights

- Reputational Impacts from Safety Incidents can far exceed operational losses and are often times not fully considered



Conclusions

- Identifying gaps in risk management processes can allow companies to more effectively protect against comprehensive impacts of safety incidents
- A better predictor of risk is needed across the industry

Source: ERM Industry Assessment of 103 AEGIS Member Utility Companies, presented by Dr. Paul Walker, St. John's University, Tobin College of Business, School of Risk Management at 2015 AEGIS Policy Holders Conference

True Cost of Managing Public Safety Events

Case Study: UPSA Member Company

| | |
|-----------------|--|
| \$45.8M | Legal: Administrative |
| \$25.7M | Legal: Settlements |
| \$ 8.5M | Health & Safety: 3 rd Party Settlements |
| \$ 4.3M | Health & Safety: Administrative |
| \$50.0M | Other Settlement Costs |
| \$10.2M | Insurance: Excess Liability |
| \$ 3.7M | Insurance: Directors Sarbanes-Oxley |
| \$ 5.5M | Risk Management |
| \$153.7M | Total |

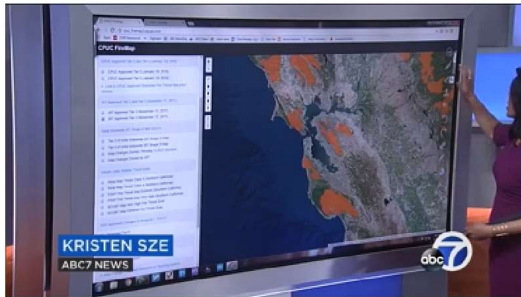
RISK GAPS AND ASSOCIATED COSTS

Expenses Are Increasing Dramatically in California Due to Recent Wildfires



- SHARE
- TWEET
- SHARE
- EMAIL

NORTH BAY FIRES
New PG&E policy may cut off electricity to Bay Area customers during high fire danger



PG&E is warning Bay Area customers about a new policy that may cut off electricity when the weather creates extreme fire danger.



NORTH BAY FIRES
PG&E unveils new wildfire safety operations center in wake of deadly North Bay fires



Santa Rosa sues PG&E over October wildfires

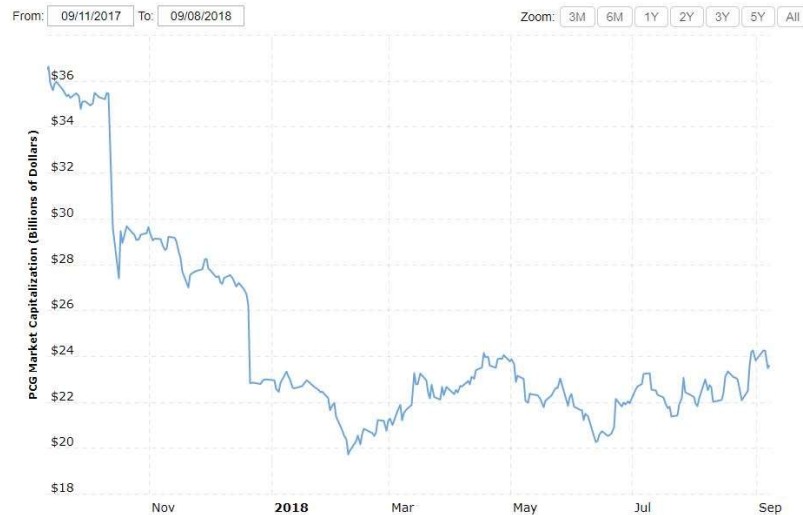
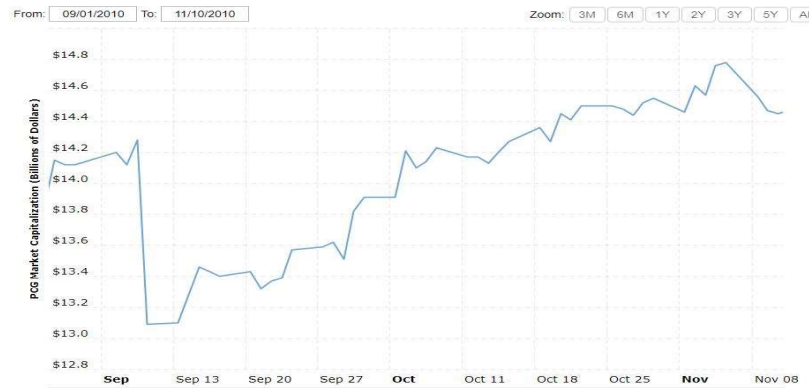


A water tender driver puts water on a home along San Miguel Road, in Santa Rosa on Monday, October 9, 2017. (Christopher Chung/The Press Democrat)

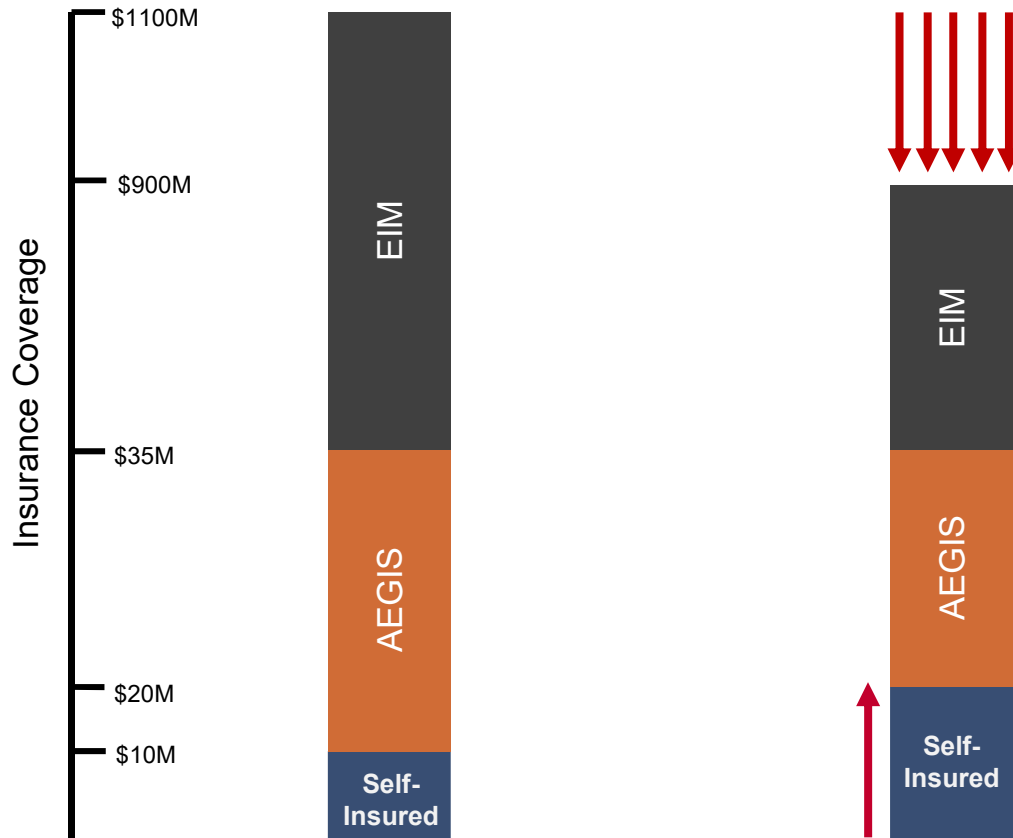
Disaster Impacts to Utility Stock Price May Be Long Lasting

- San Bruno:
 - Quick rebound on stock price after explosion

- Wildfires:
 - \$17.7B hit to market cap with no rebound yet

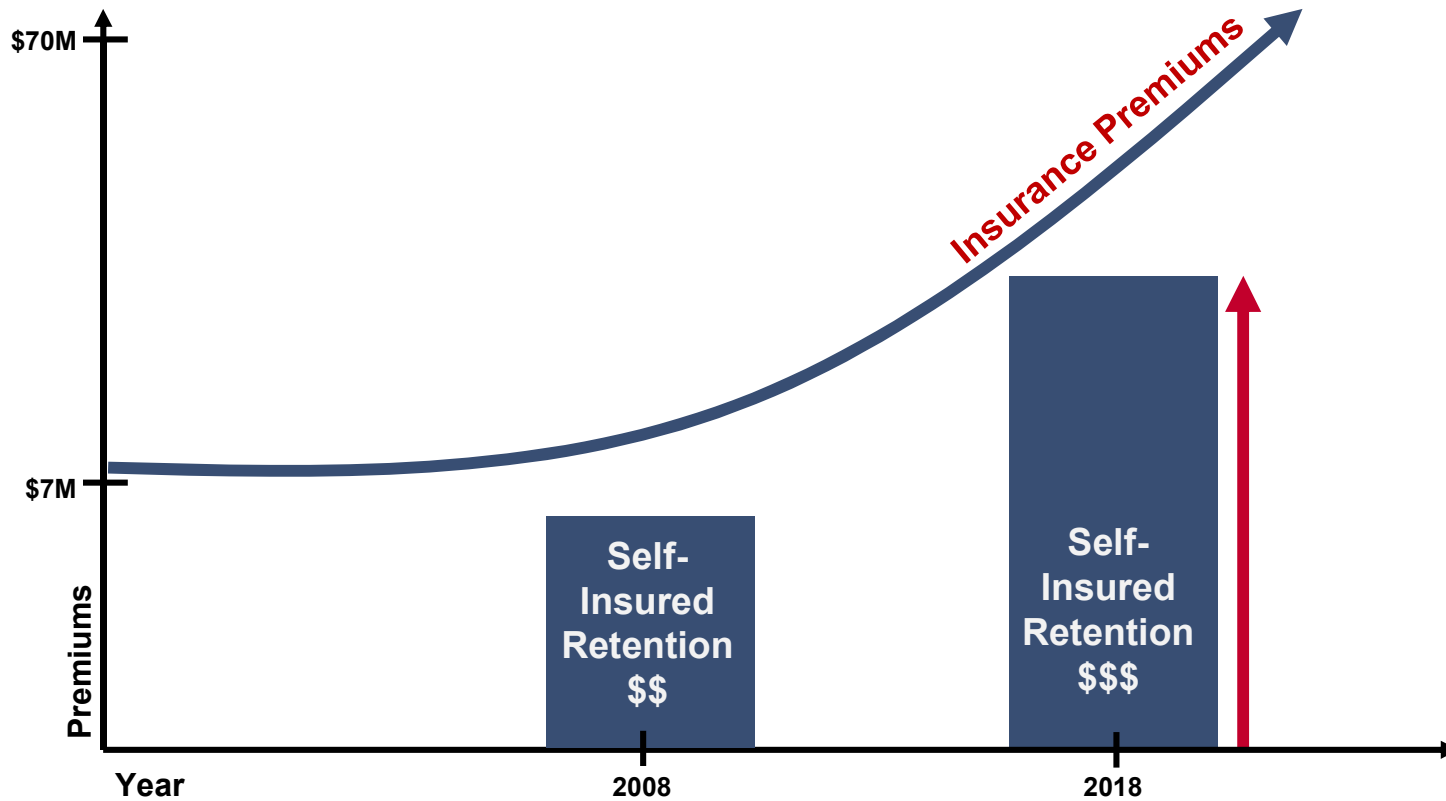


Insurance Coverage and Availability Has Decreased Significantly in Recent Years



- In some case, a second incident over \$35M in the same year will not be covered
- Co-insurance requirements from 25% – 50%

Recent Insurance Premium Increases Have Led Utilities to Rely on Self-Insured Retention



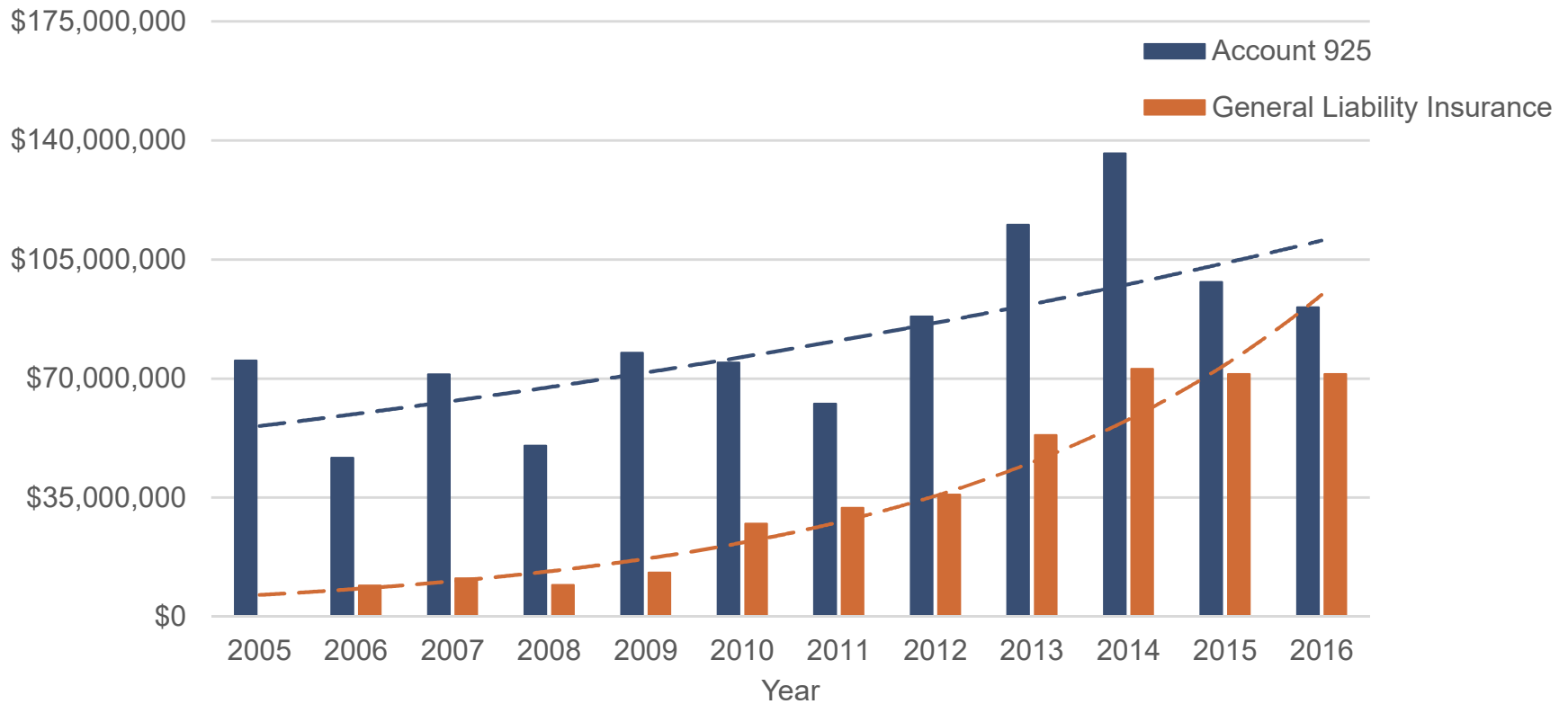
Liability for Public Power Is Increasing Rapidly

- After the U.S. Supreme Court decisions in 2012 and 2015, sovereign immunity for public power has been reduced or eliminated in some states and is continuing to become more restrictive*
- Public Power is being held to the same standards as IOU's, with:
 - Significantly less resources available, both financial and staff
 - Customers unwilling to accept higher utility rates
 - Increased state legislative oversight

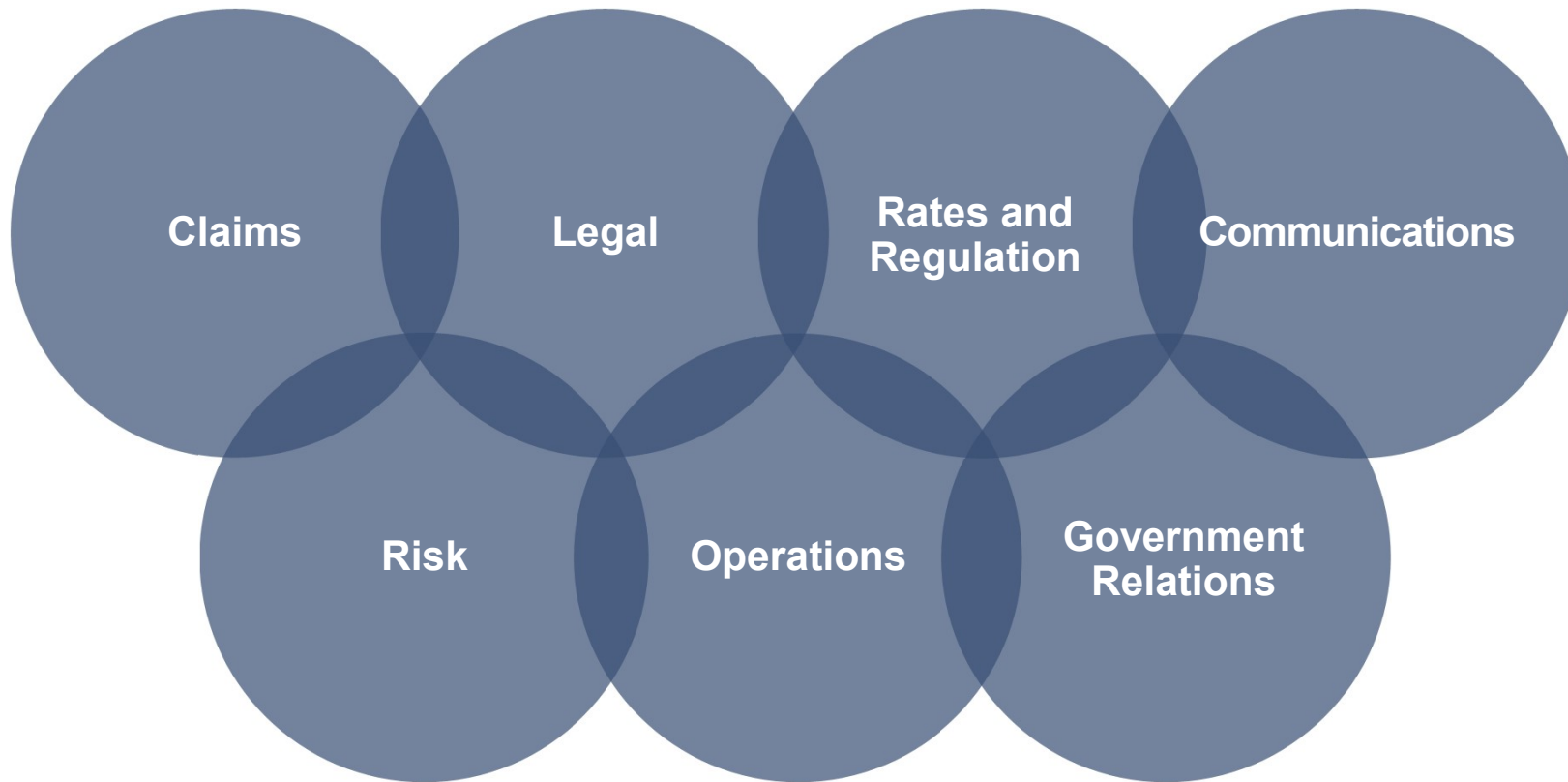
*<https://www.law.com/newyorklawjournal/2018/03/12/recent-developments-in-state-action-immunity/?slreturn=20180630140427>

DIRECT AND INDIRECT COSTS

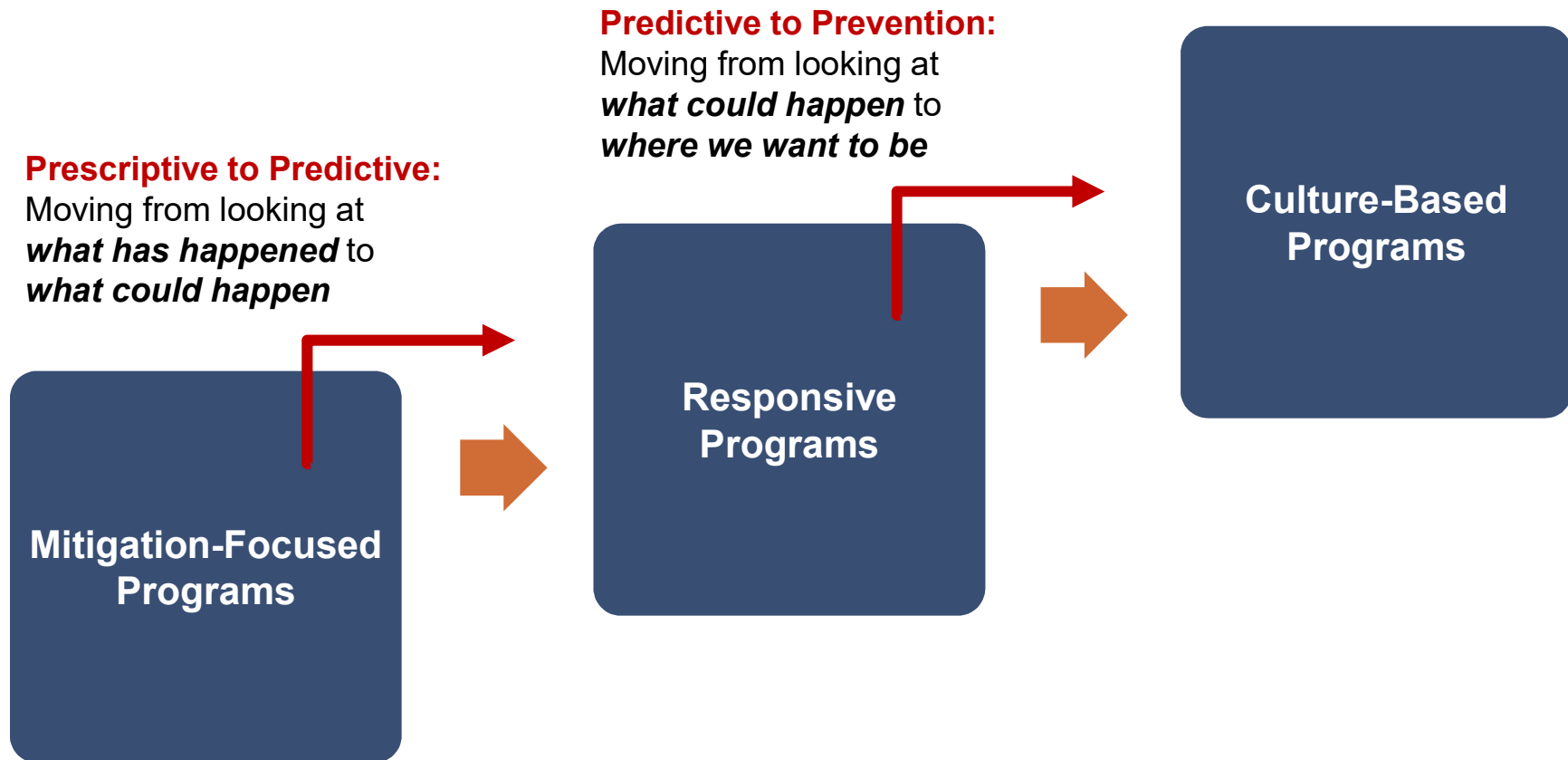
UPSA Member — FERC Account 925 Injuries and Damages Annual Spending



Public Safety Effects the Entire Organization



Evolution of Public Safety Programs — The Need for the Culver Public Safety Index



Characteristics of a Good Public Safety Index

- Easily understandable by a wide range of internal audiences
- Offers an opportunity to quantify “moving the needle”
- Links with utility strategic priorities
- Prescriptive and Predictive
- Takes into consideration:
 - Outreach effectiveness metrics
 - Risk identification and systems for risk mitigation (e.g., Safety Management System)
 - Incident numbers
 - Financial Investment in Prevention vs. Loss
 - Safety Culture and Corporate KPIs

How the Culver Public Safety Index Helps Position Your Public Safety Programs

- Key benefits to utility:
 - Simple indicators and steps to take to fill any gaps in safety programs
 - Identify company's risk exposure
 - Understand successes in safety programs – what is working well
 - Benchmark against other utilities
 - Indicate whether efforts are paying off
 - Potential for favorable regulatory treatment with high scores
- How can it be used for positioning?
 - Call attention to a utility's successes in their safety programs and safety culture
 - Differentiate a company from its competitors
 - Instill confidence in investors
 - Highlight a company's measurable safety efforts to regulators, the public, and other stakeholders

Next Steps — Identifying Key Considerations for the Culver Public Safety Index and Utility Champions

- Define measurable variables for qualitative considerations
 - Corporate KPIs
 - Safety Culture
 - Safety Management Systems
- Develop modeling framework and methodology to translate variables into an easily understandable scoring system
 - Define weights of each variable
 - Segmentation (industry, size, type, other)
 - Standardized definition for incidents (at fault, reported, severity, etc.)
- Piloting Project
 - Real-world exposure and testing to receive industry feedback and provide iterative refinements to the Index
 - Looking for utility champions to take an initial survey to help further shape the Index

Enhancing Public Safety Impact Through Our Partnerships, Approach, and Research

