Introduction to Resilience

Planning and Public Policy Committee Meeting
Sept. 18, 2019
Sustainable Future: Understanding the Risk

• Managing risks means reducing risk, transferring and sharing risk, preparing for impact, and responding and recovering efficiently.

• Risk’s three key characteristics:
  - Holistic framework for assessing risks
  - Options for dealing with uncertainty
  - Proactive
Project Resilience Began in 2014

• General manager commissioned a cross-functional project to define a strategy and long-term vision for resilience in 2014

• Initial LCRA resilience strategy was defined in December 2014, with input from entire executive team

• Report identified major gap between cybersecurity goals and available resources
Real and Sustained Financial Commitment

Cybersecurity Department Operations and Maintenance Budget

- **Full-Time Equivalents**: 1, 6, 14, 15, 22, 22, 23
- **Budget**: $564,365, $1,582,268, $2,799,863, $3,301,967, $5,053,158, $6,076,956, $6,257,823

**Years**:
- FY 2014
- FY 2015
- FY 2016
- FY 2017
- FY 2018
- FY 2019
- FY 2020

**Amounts**:
- FY 2014: $0, $564,365
- FY 2015: $1,000,000, $1,582,268
- FY 2016: $2,000,000, $2,799,863
- FY 2017: $3,000,000, $3,301,967
- FY 2018: $4,000,000, $5,053,158
- FY 2019: $5,000,000, $6,076,956
- FY 2020: $6,000,000, $6,257,823
History of Resilience

Integrated LCRA Resilience

Safety 365

2016 to 2018

Cyberphysical Convergence

2015 to 2018

Cybersecurity Fundamentals

2014 to 2018

Public Safety Fundamentals

Pre-2014

Safety Fundamentals

Pre-2014
Establishing the Resilience Group

1. Safety
2. Public Safety
3. Cybersecurity
Organizational Resilience
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Potential Threats and Challenges

• Increased demand due to population growth
• Cyberattacks
• Terrorism
• Espionage
• Unknown unknowns
Goal

To create a more resilient LCRA and bolster the resilience of our communities and customers.
Current Areas of Focus

• Business unit focus on:
  - Reliability and mission continuity
  - Future strategic initiatives

• Business Continuity group exists, being developed further

• Public Safety, Safety Services and Cybersecurity well established
Synergy Replacing Silos

• Vertical and horizontal alignment of LCRA-wide objectives
• Strengthen collaboration
• Build business continuity plans
• Develop cross-enterprise communication
LEADERSHIP
INTERNALIZATION
DEFINED PROGRAMS
VISION
Components of Resilience

1. SAFETY
2. PUBLIC SAFETY
3. CYBERSECURITY
SAFETY SERVICES

• Safety specialists
• Safety technical trainer
• Safety program specialists
• Industrial hygienist
Training and Programs

• Training
  - In-house safety curriculum
  - Contracted specialized training
  - Online Learning Management System
  - Safety meetings
  - Contractor orientations

• Programs
  - Behavior-based safety program (STOP)
  - Field hazard assessments
  - Annual medical surveys
Safety Specialists
Field Hazard Assessments
Safety Services Impact – Fiscal Year 2019

- 280 safety meetings/trainings performed
- 300 employees trained in first aid/CPR/automated external defibrillator
- Over 3,000 STOP observations submitted
- 987 FHAs conducted
Safety Services Impact

37% decrease in recordable incidents from FY 2018 to FY 2019

<table>
<thead>
<tr>
<th>Recordable Incident Rate:</th>
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<tbody>
<tr>
<td>LCRA Rolling Average</td>
<td>1.12</td>
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<tr>
<td>Industry Average</td>
<td>1.8</td>
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