## Committee Membership

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
<th>Phone Number</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brian Wight, Chair</td>
<td>URS</td>
<td>402-952-2557</td>
<td><a href="mailto:brian_wight@urscorp.com">brian_wight@urscorp.com</a></td>
</tr>
<tr>
<td>Korey Brunken</td>
<td>URS</td>
<td>402-952-2583</td>
<td><a href="mailto:korey_brunken@urscorp.com">korey_brunken@urscorp.com</a></td>
</tr>
<tr>
<td>LTC James Jordano</td>
<td>USACE - Omaha</td>
<td>402-995-2002</td>
<td><a href="mailto:james.j.jordano@usace.army.mil">james.j.jordano@usace.army.mil</a></td>
</tr>
<tr>
<td>Chris Langan</td>
<td>Lamp Rynearson</td>
<td>402-496-2498</td>
<td><a href="mailto:chris.langan@lra-inc.com">chris.langan@lra-inc.com</a></td>
</tr>
<tr>
<td>Kim Thomas</td>
<td>USACE - Omaha</td>
<td>402-995-2448</td>
<td><a href="mailto:kimberly.s.thomas@usace.army.mil">kimberly.s.thomas@usace.army.mil</a></td>
</tr>
<tr>
<td>Jodi Vacarro</td>
<td>Coastal Environmental</td>
<td>402-991-1199</td>
<td><a href="mailto:jvacarro@coastalhazmat.com">jvacarro@coastalhazmat.com</a></td>
</tr>
<tr>
<td>Brec Wilshusen</td>
<td>SolidEn Engineering &amp; Consulting</td>
<td>402-802-0094</td>
<td><a href="mailto:brec.wilshusen@soliden.biz">brec.wilshusen@soliden.biz</a></td>
</tr>
</tbody>
</table>
History- *When did COOP Begin?*
Founded in 1913 by Arthur Andersen & Clarence De Lany

Andersen's motto was "Think Straight, Talk Straight."

Responsibility was to investors, not their clients‘ Management
Established in 1985 by Kenneth Lee Lay
Earned $42.4 million in 1999
2000 Earnings $101 Billion
22,000 employees

- Petrochemical
- Oil & Gas
- Plastics
- Broadband
- Power
- Principal Investments
- Pulp & Paper
- Commodities Risk Management
- Steel
- Shipping & Freight
- Weather Risk Management
"The Enron scandal grew out of a steady accumulation of habits & values & actions that began years before & finally spiraled out of control."

Authors McLean and Elkid, “The Smartest Guys in the Room”
Assemble Resources

- Congress
- Federal Justice System
- National Standards Boards

"Established the Definition of Critical Document"
Federal Justice System

Critical Records

- “Are documents used by critical resources for legal, regulatory, and operational purposes”
- “Includes documents, drawings & photographs”
Federal Justice System

Critical Process

“Process that is critical for maintaining business continuity”

Critical Data

“Includes critical IT applications & components needed to support those applications”

“Includes operating systems, databases & data”
Congress

✓ The Sarbanes–Oxley Act of 2002
✓ Financial Services Modernization Act (Financial Institutions customer information security)
✓ FBI Red Flag Program (Loan Institutions)
✓ Banking Circular 177, 187, FIL 68-97
✓ Foreign Corrupt Practices Act
✓ Computer Security Act 1987 (Fed)
✓ Electronic Fund Transfer Act (Consumer Liabilities)
National Standards Boards & Organizations

- NFPA 1600
- International Organization for Standardization (ISO) 17799
- British Standard Institute (BSI) BS 7799
- Disaster Recovery Institute International (DRII)
- Joint Commission of Accreditation of Health Organizations (JCAHO)
DRII 1997 Professional Practices for BC Planners

1. Project Initiation & Management
2. Risk Evaluation & Control
3. Business Impact Analysis
4. Developing Business Continuity Strategies
5. Emergency Response & Operations
6. Developing & Implementing Business Continuity Plans
7. Awareness & Training Programs
8. Maintaining & Exercising Business Continuity Plans
9. Public Relations & Crisis Communications
10. Coordination with Public Authorities
BCP Process

6 Stages

Stage 1
Risk Mgt

Stage 2
BIA

Stage 3
Strategy Develop

Stage 4
Plan Develop

Stage 5
Plan Testing

Stage 6
Plan Maint
Speaking the Language.....

Operational Interruption Occurs

- Recovery Point Objective
- Recovery Time Objective

Maximum Tolerable Downtime

Normalcy Restored
BIA Qualitative/Quantitative Analysis

Qualitative Analysis

Quantitative Analysis

Subjective

Objective
### BIA Qualitative/Quantitative Analysis

**Deliveries R’ Us**

<table>
<thead>
<tr>
<th>Critical Function</th>
<th>Critical Process</th>
<th>MTD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliver Products</td>
<td>Truck Maintenance</td>
<td>24 Hours</td>
</tr>
</tbody>
</table>
Strategies

- Risk Acceptance
- Risk Avoidance
- Risk Reduction
- Risk Transfer
Risk Management Strategy

**“We Don’t Do” Truck Maintenance**

<table>
<thead>
<tr>
<th>Risk Acceptance</th>
<th>Do Nothing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk Avoidance</td>
<td>Perform Maintenance</td>
</tr>
<tr>
<td>Risk Reduction</td>
<td>Replace Old Trucks</td>
</tr>
<tr>
<td>Risk Transfer</td>
<td>Purchase Insurance</td>
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</table>

*Deliveries R’ Us*
## Risk Management Strategy - Quantitative Analysis

<table>
<thead>
<tr>
<th>Risk Control Option</th>
<th>Risk Control Category</th>
<th>Option Cost</th>
<th>Annual Loss Expectancy</th>
<th>Risk Reduction</th>
<th>Status Quo</th>
<th>Risk Acceptance</th>
<th>$0</th>
<th>$100k fines &amp; loss</th>
<th>$0</th>
</tr>
</thead>
<tbody>
<tr>
<td>Replace Trucks</td>
<td>Risk Reduction</td>
<td>$1m</td>
<td>$50k</td>
<td>$50k/yr</td>
<td>Status Quo</td>
<td>Risk Acceptance</td>
<td>$0</td>
<td>$100k fines &amp; loss</td>
<td>$0</td>
</tr>
</tbody>
</table>
Critical Priority Risk Index

Weighted Criteria

Evaluation Criteria
Critical Priority Risk Index- Weighted Criteria

- Probability 45%
- Magnitude/Severity 30%
- Warning Time 15%
- Duration 10%
Critical Priority Risk Index - Evaluation Criteria

- **Probability**
  - Unlikely (1), Possible (2), Likely (3), Highly Likely (4)

- **Magnitude/Severity**
  - Negligible (1), Limited (2), Critical (3), Catastrophic (4)

- **Warning Time**
  - >24 hours (1), 12-24 hours (2), 6-12 hours (3), <6 hours (4)

- **Duration**
  - <6 hours (1), <24 hours (2), <1 week (3), >1 week (4)
## Critical Priority Risk Index

<table>
<thead>
<tr>
<th>Hazard Type</th>
<th>Probability</th>
<th>Severity</th>
<th>Warning Time</th>
<th>Duration</th>
<th>Priority Risk Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Unrest</td>
<td>1 (.45)</td>
<td>1 (.30)</td>
<td>4 (.6)</td>
<td>2 (.2)</td>
<td>1.55</td>
</tr>
<tr>
<td>Earthquake</td>
<td>1 (.45)</td>
<td>1 (.30)</td>
<td>4 (.6)</td>
<td>1 (.1)</td>
<td>1.45</td>
</tr>
<tr>
<td>Flash Flood/Landslide</td>
<td>3 (1.35)</td>
<td>3 (.9)</td>
<td>4 (.6)</td>
<td>1 (.1)</td>
<td>2.95</td>
</tr>
<tr>
<td>Major Fire (other than brush)</td>
<td>4 (1.8)</td>
<td>4 (1.2)</td>
<td>4 (.6)</td>
<td>4 (.4)</td>
<td>4.00</td>
</tr>
<tr>
<td>Major Fire- Brush Fire</td>
<td>4 (1.8)</td>
<td>4 (1.2)</td>
<td>4 (.6)</td>
<td>4 (.4)</td>
<td>4.00</td>
</tr>
<tr>
<td>Major Hazardous Material Event</td>
<td>2 (0.9)</td>
<td>3 (.9)</td>
<td>4 (.6)</td>
<td>2 (.2)</td>
<td>2.60</td>
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<tr>
<td>Major Transportation Accident-Aircraft</td>
<td>3 (1.35)</td>
<td>2 (.6)</td>
<td>4 (.6)</td>
<td>1 (.1)</td>
<td>2.65</td>
</tr>
<tr>
<td>Major Transportation Accident-Ground</td>
<td>3 (1.35)</td>
<td>3 (.9)</td>
<td>4 (.6)</td>
<td>2 (.2)</td>
<td>3.05</td>
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<tr>
<td>Major Utility Failure</td>
<td>3 (1.35)</td>
<td>3 (.9)</td>
<td>2 (.3)</td>
<td>3 (.3)</td>
<td>2.85</td>
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<tr>
<td>Pandemic Event</td>
<td>2 (0.9)</td>
<td>3 (.9)</td>
<td>2 (.3)</td>
<td>4 (.4)</td>
<td>2.50</td>
</tr>
<tr>
<td>Pipeline Failure</td>
<td>2 (0.9)</td>
<td>3 (.9)</td>
<td>4 (.6)</td>
<td>3 (.3)</td>
<td>2.70</td>
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<tr>
<td>Terrorism Event</td>
<td>2 (0.9)</td>
<td>3 (.9)</td>
<td>4 (.6)</td>
<td>4 (.4)</td>
<td>2.80</td>
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<tr>
<td>Tsunami</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Pest / Vector Infestation</td>
<td>1 (.45)</td>
<td>1 (.30)</td>
<td>1 (.15)</td>
<td>1 (.1)</td>
<td>1.00</td>
</tr>
<tr>
<td>Weather Related- Summer</td>
<td>4 (1.8)</td>
<td>4 (1.2)</td>
<td>4 (.6)</td>
<td>4 (.4)</td>
<td>4.00</td>
</tr>
<tr>
<td>Weather Related- Winter</td>
<td>4 (1.8)</td>
<td>4 (1.2)</td>
<td>4 (.6)</td>
<td>4 (.4)</td>
<td>4.00</td>
</tr>
</tbody>
</table>
Continuity of Operations Planning

Planning for Success – Value Systems
We have a plan........

Our vendors will be there for us........

- 66% expect a major regulatory incident every 5 years
- 58% expect a major data loss incident every 5 years
- 60% expect a major IT incident at least annually
- Best in class organizations are more effective implementing the entire range of controls
- Exec’s & IT Directors have different risk perceptions indicating a “Lack of communication in the organization, which is likely to lead to wasted resources”
Emergency response services will be there to help........

- March 26, 2008 at 1:57 PM
- Explosion at 8800 S. Sepulveda Blvd, LA
- 400 customers remained without electricity
- Businesses within 2 blocks on Sepulveda Boulevard were closed
- In-n-Out Burger 1st Operational Business
Strategic Management Associates
Threat Management, Planning & Compliance

- Founded in 1932
- Harmon Trophy
- Collier Trophy (NAA)
- Octave Chanute Award (Western Society of Engineers)
- Congressional Gold Medal
1985 General Motors Purchased Hughes Aircraft
$5.2 Billion

Closed in 1997