



BAYWORK & Colorado Springs Utilities

September 20, 2012

Safety & Housekeeping



About Us



- Four-service municipal enterprise
 - Electric, natural gas, water, wastewater
 - ~ 820,000 metered accounts

Colorado Springs Utilities

- Our mission is to provide safe, reliable, competitively-priced electric, natural gas, water and wastewater services to the citizen owners and customers of Colorado Springs Utilities.
- The University of Springs Utilities supports this mission by developing and maintaining a skilled workforce. USU delivers learning for:
 - 30 craft training programs (14 department of labor / veterans administration registered)
 - 52 safety and environmental certifications
 - 33 heavy equipment certifications
 - 7 customer service programs
 - 17 system specific IT systems and;
 - Multiple professional and leadership development opportunities



UNIVERSITY OF SPRINGS UTILITIES

- Consolidated training function since 2001
- University concept implemented in 2004
- Managed by five Schools of Learning
 - Organizational and Professional Development
 - Customer Relationships
 - Technical Field Operations
 - Technical Plant Operations
 - Environmental, Health and Safety

University of Springs Utilities Schools of Learning

School of Organizational and Personal Development

- *Personal Effectiveness*
- *Supervisor & Manager Development*
- *Project Management*
- *Continuous Improvement*
- *Financial Management*
- *Computer Information Technology*

School of Customer Relationships

- *Customer Relations*
- *Business Processes & Procedures*
- *Utility Knowledge*
- *Customer Information System*

School of Technical Field Operations

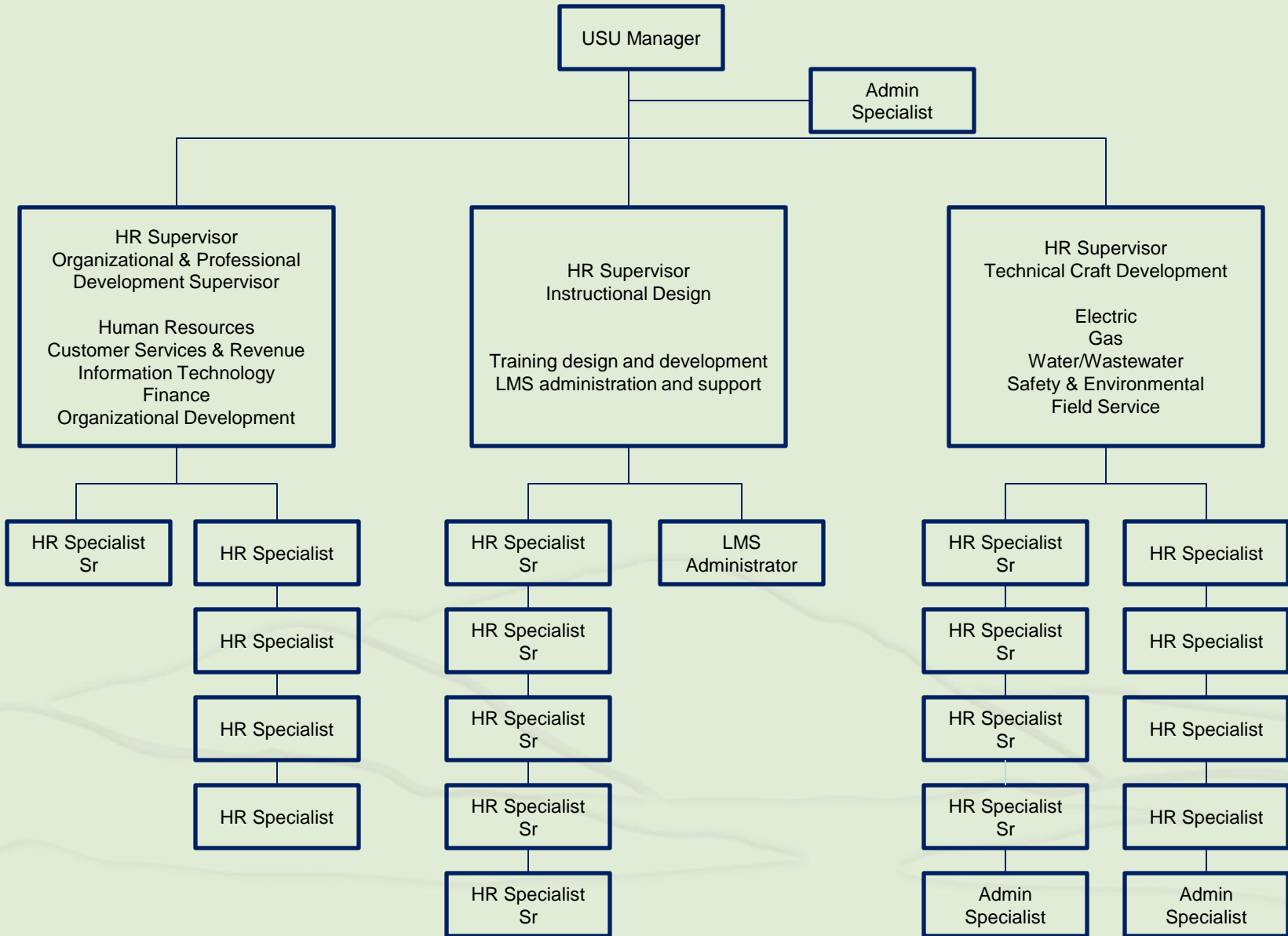
- *Field Apprenticeship Programs*
- *Journey level training for field employees*
- *Equipment Operator Qualification*
- *Operator Qualification*
- *Water License and Certification*

School of Environmental, Health and Safety

- *Environmental*
- *Safety and Health*
- *Business Continuity*

School of Technical Plant Operations

- *Plant Apprenticeship Programs*
- *Journey level training for Power, Water Collection and Distribution Plants*





Colorado Springs Utilities

It's how we're all connected

2005 ASTD

**BE
ST**TM

**AWARD
WINNER**



***Best New Corporate University
2004 - 2nd Place***

***Best-in-Class Instructional Design &
Curriculum Development
2004 & 2005 – Honorable Mention***



***Instructional Design & Curriculum
Development Leader of the Year
2004 – Honorable Mention***

Training Request Process

- Customer requests training
 - Types of request: off-site vendor training, in-house, revised, regulatory, new development...
- USU performs needs analysis with customer
 - Training request form
 - Manager approval
 - Brainstorm possible solutions
 - Training methods
 - Development time
 - Process
- Request presented to advisory board

Prioritization Process

- Advisory Board
 - Discusses merits of request
 - Agree on ultimate goal of the training
 - Determine success factors or indicators
 - Determine severity of the issue.
 - Is the issue a “bench depth”, productivity, new process, new tool issue, etc...?
- A due date is agreed upon
- Project is listed in centralized training project management system

Prioritization Process (cont.)

- Project due date is integrated with all other projects
 - If due date is obtainable, project moves forward without further discussion
 - If due date appears to be at risk, further discussions are held with requesting customer
- Competing Priorities:
 - Within a single school of learning, the advisory board determines the higher priority
 - In multiple schools of learning, the deans are engaged and the priority is determined based on most critical factors, compliance, safety, bench strength, new process, new tools/equipment, productivity



Instructional Design Process

- ADDIE
 - Design
 - Action Mapping
 - Tools
 - Selecting SME
 - Initial SME Meeting
 - Building a relationship
 - Discuss solution
 - Benefits
 - Collaboration and SME involvement
 - Time commitment
 - Target dates and project plan

Instructional Design Process

- Development
 - SME Involvement
 - Engaged throughout the process
 - Pilot
 - Lectora Review Link
- Implementation
 - Trainer Communication with Customer
 - Reporting back to Advisory Board
- Evaluation
 - Kirkpatrick – 4 levels
 - Reaction
 - Learning
 - Behavior
 - Results



Instructional Design Process

- Apprenticeships / Training Programs
 - Performance Support System (PSS)
 - Overview of program and components
 - Curriculum functionality in ULS (our LMS)

Overview of Resources and Tools

- Content libraries
 - MindLeaders
 - Business library
 - Safety courses
 - General Physics
 - Operations and safety
 - New Media Learning
 - HR compliance
 - JJ Keller
 - Safety
- Software and equipment
 - Software
 - Video-editing
 - Audio-editing
 - DVD editing/burning
 - Graphics
 - Soundtrack
 - Equipment
 - Cameras – still/video
 - Microphones
 - Teleprompter
 - Lights

Overview of Resources and Tools

- Software tools and product samples
 - Avatars and interactivity
 - Security Awareness
 - **Tools used:** Lectora, Code Baby, Adobe Premier, Adobe Fireworks, ProShow Producer, SketchUp, Flash, SnagIt, Adobe Audition, video camera, photography
 - **SME development time:** 10 – 40 hours
 - **IDS development time:** 400+ hours



ITPP

- **Tools used:** Lectora, Adobe Audition, SnagIt, Adobe Fireworks, photography
- **SME development time:** 30 – 40 hours
- **IDS development time:** 110 hours



Overview of Resources and Tools

- Software tools and product samples
 - [Supervisor Compliance](#)
 - **Tools used:** Xtranormal, Adobe Premier, SnagIt
 - **SME development time:** 3 hours
 - **IDS development time:** 37 hours
 - Creative video
 - [Wastewater Calculation](#)
 - **Tools used:** Video projector, video camera, Adobe Premier
 - **SME development time:** 5 hours
 - **IDS development time:** 40 hours
 - Video field demonstration
 - [Excavation & Trenching](#)
 - **Tools used:** Camcorders, Adobe Premiere, Sonic Fire Pro
 - **SME development time:** Field – 6 hours, Recording – 3 hours
 - **IDS development time:** Pre-Production – 8 hours, Production – 12 hours, Post Production - 43 hours

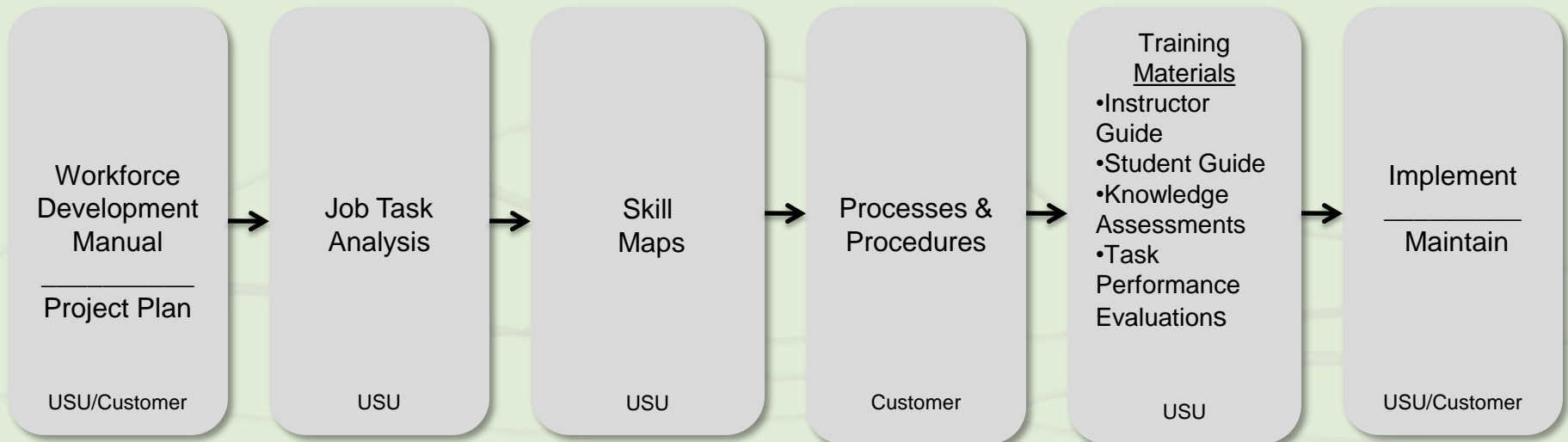


Overview of Resources and Tools

- Skill Acquisition and Maintenance Program
 - Began in Energy Supply
 - Now incorporated across the organization
 - 13 programs currently in development
 - Energy Supply (four)
 - Water Resources (two)
 - Customer & Corporate Services (seven)

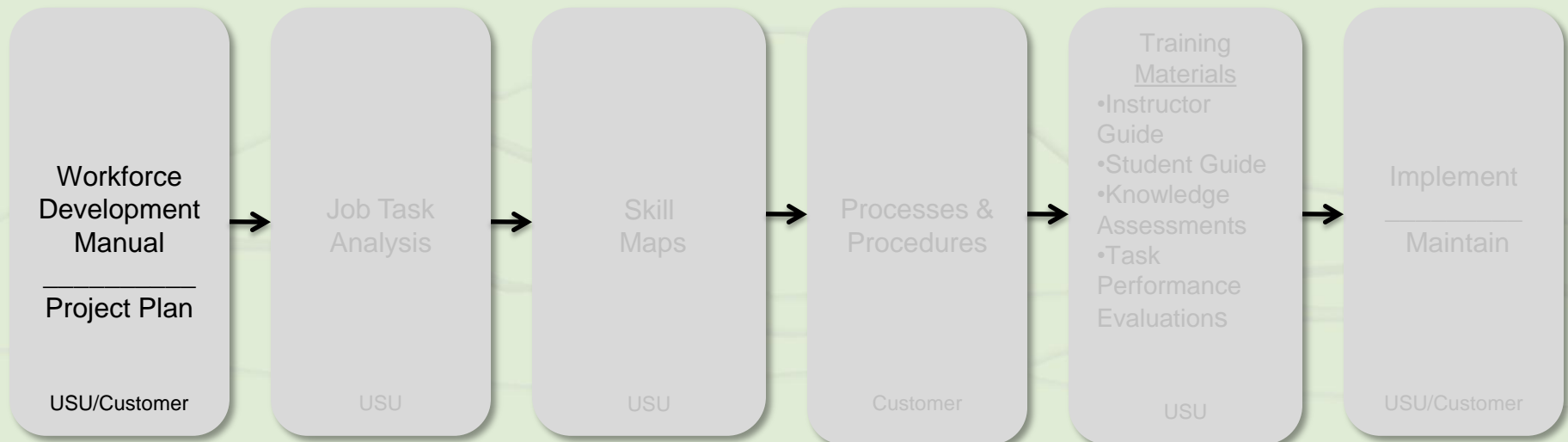
Overview of Resources and Tools

- Skill Acquisition and Maintenance Program
 - Program Goals & Objectives
 - Provide consistent and appropriate standards for workforce development
 - Provide optimum safety and competence



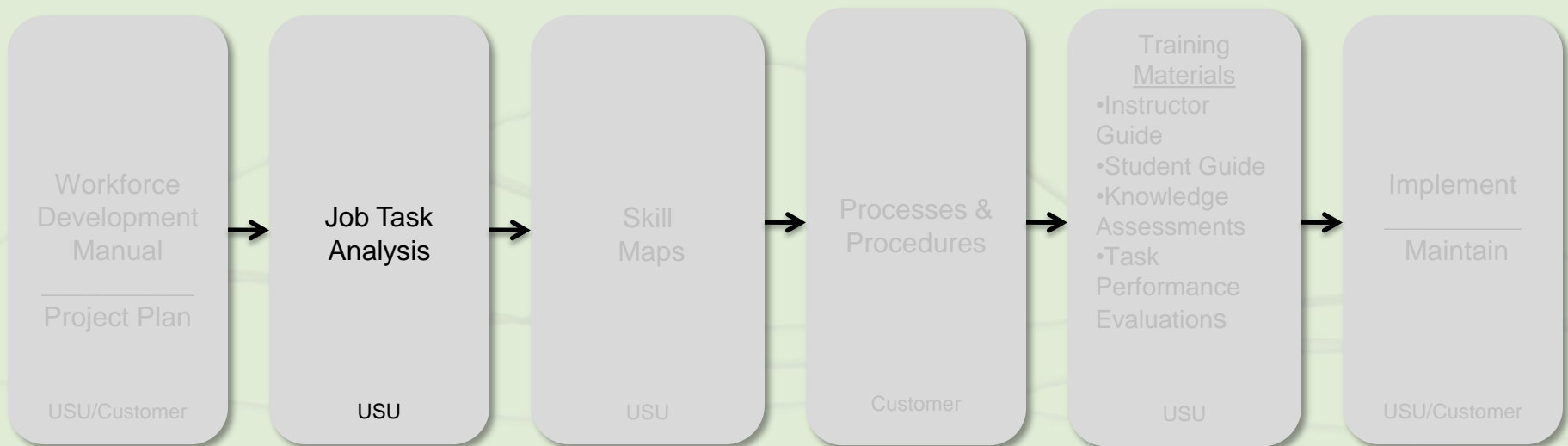
Overview of Resources and Tools

- Skill Acquisition and Maintenance Program
 - Workforce Development Manual
 - Outlines all components within SAMP program
 - Provides specific customer requirements for testing, training and on going maintenance
 - Project Plan
 - Provides schedule with tasks and dates for all aspects of the project



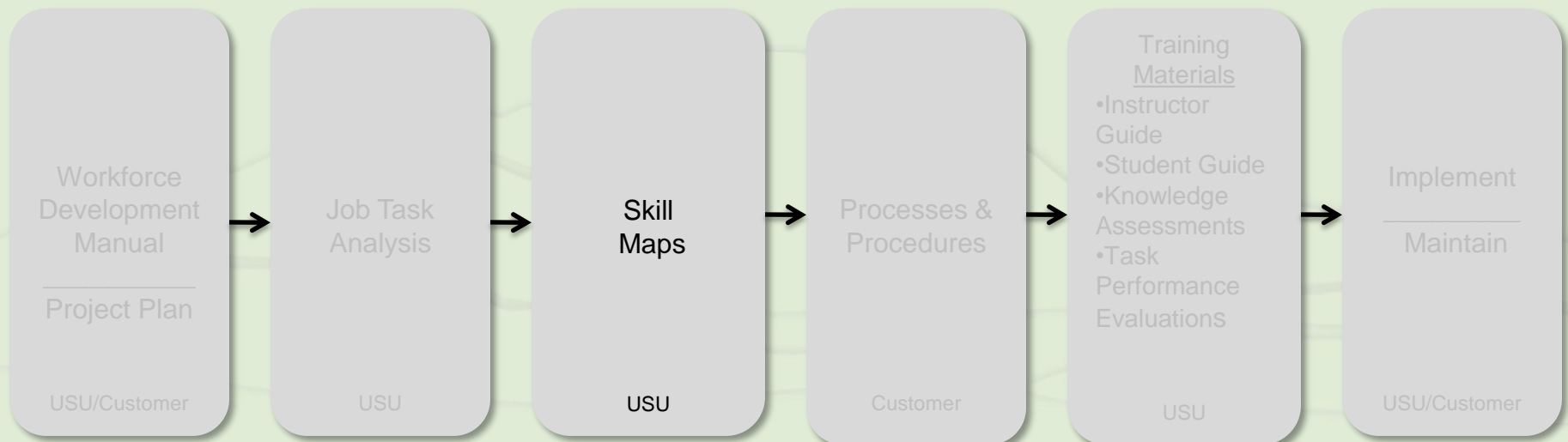
Overview of Resources and Tools

- Skill Acquisition and Maintenance Program
 - Job Task Analysis
 - Lists all tasks a group is responsible for performing
 - Broken down into functional areas of responsibility or other functional groupings
 - Provides hierarchical representation of steps to perform a task.



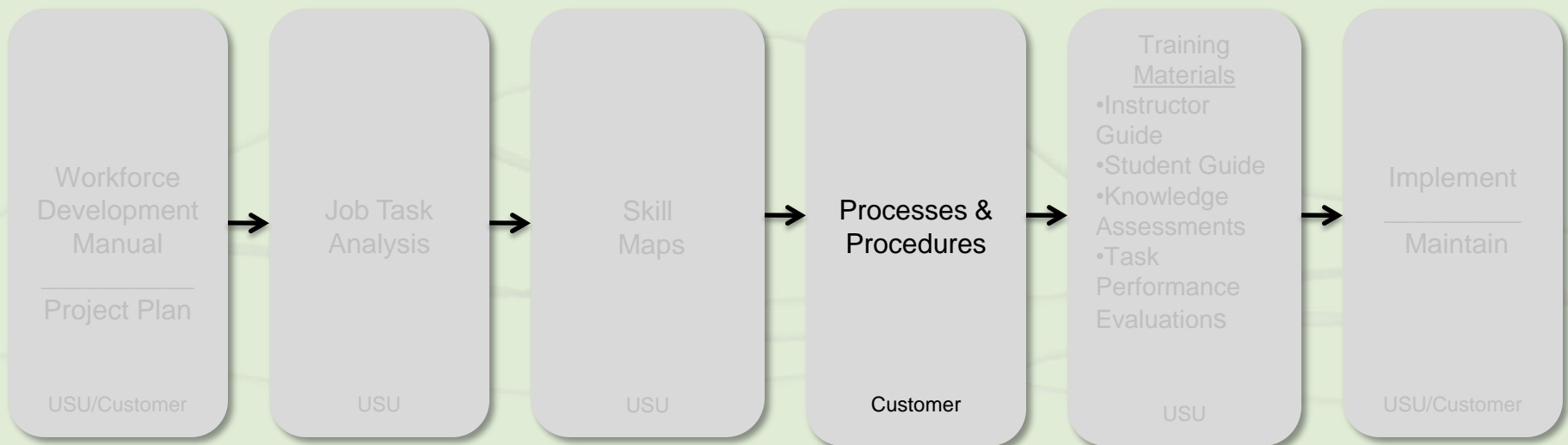
Overview of Resources and Tools

- Skill Acquisition and Maintenance Program
 - Skill Maps
 - Demonstrates progression of program training requirements
 - Ensures training progresses from basic to complex concepts
 - Describes minimum qualification requirements for each classification



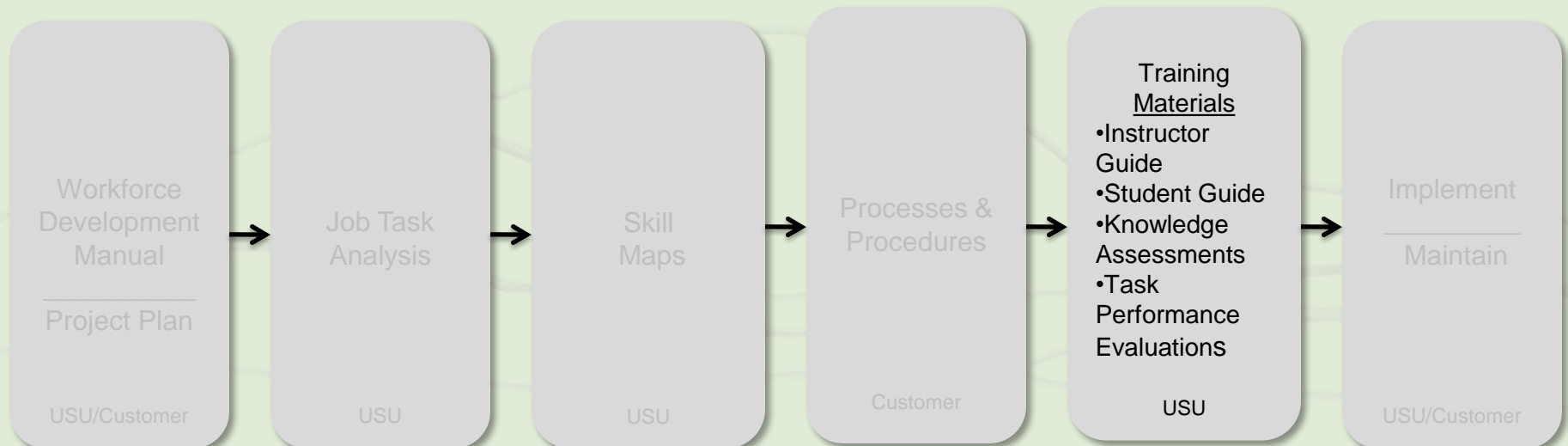
Overview of Resources and Tools

- Skill Acquisition and Maintenance Program
 - Processes & Procedures
 - Provides step-by-step directions to complete a specific task
 - Ensures consistency during problem analysis
 - Ensures operation of tasks are performed exactly the same each time



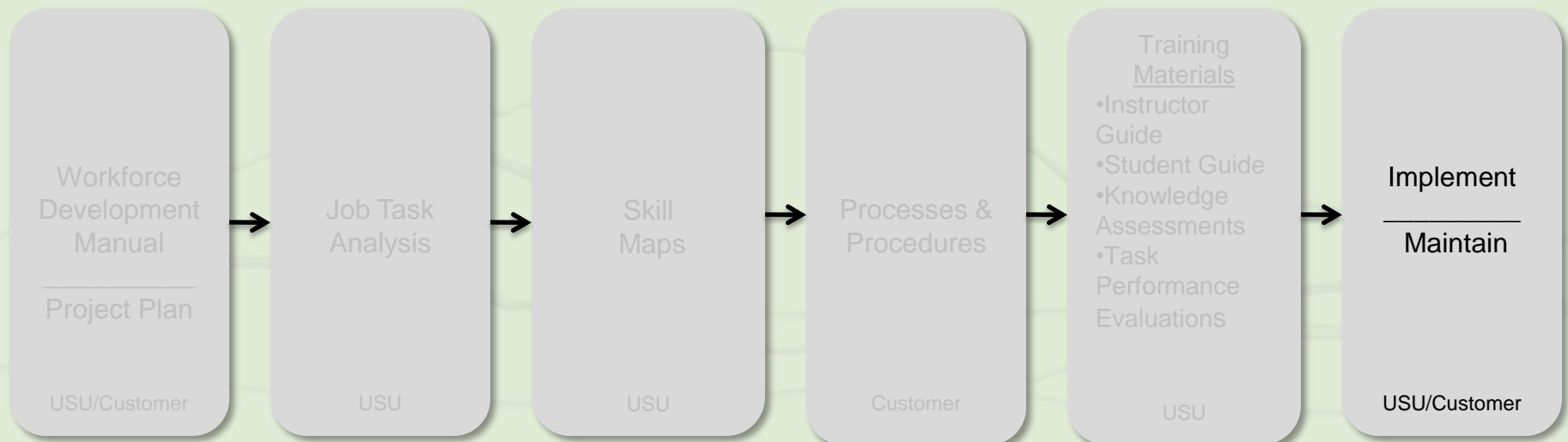
Overview of Resources and Tools

- Skill Acquisition and Maintenance Program
 - Training Materials
 - Instructor Guide
 - Student
 - Knowledge Assessment (KA) – Formal, proctored test
 - Task Performance Evaluation (TPE) –assesses the student's knowledge and skill level during task performance.



Overview of Resources and Tools

- Skill Acquisition and Maintenance Program
 - Implement and Maintain
 - Develop and implement Train the Trainer program
 - Place employees in program – entry level vs. competent level employee
 - Conduct annual audits
 - Maintain program/material modifications



Production Lab Tour

- Hardware / Equipment
- Pre-production, production, post-production
- Video shoot walk-through
- Software
- Deliverables

