The Journey to Lean
Transforming the Organization

Tumwater, Washington
March 24, 2011

Carolyn Corvi
Why We Are Here

“We can’t rely on short-term solutions. Short-term solutions may cause less pain now, but we need a budget that is both sustainable and long-term.”

“Let’s work together. Let’s be bold and courageous.”
Where Do We Begin?
The Toyota Production System

“There is no magic method. A total management system is needed that develops human ability to its fullest capacity to best enhance creativity and fruitfulness, to utilize facilities and machines well, and to eliminate all waste…”

“… this production system represents a concept in management that will work in any type of business.”

Taiichi Ohno
Lean Production System

Kaizen + Respect for People

Just-In-Time
- Producing only what is needed
- When it's needed
- At the right time
- Using only the material, equipment, labor and space needed

- People
- Standard Work
- Takt Time Production

- Material
- Standard Work-in-Process
- One Piece Flow

- Equipment
- Operational Availability
- Pull Production

Heijunka – Level Production

JIDOKA
- Automation with the human touch or intelligent automation
- Machines that stop and respond to every abnormality

Cost reduction through elimination of MUDA by harmonizing quality, quantity, and timing.
Focus on the Waste

Typical Business

90% Waste
10% Value Added

Traditional Approach

90% Opportunity
Eliminate Waste
10% Value Added

Lean Approach

Focus Here
Ignore This

Focus Here
Focus Here
Identify the Waste

- Overproduction
- Defects or Poor Quality
- Time on Hand (Waiting)
- Movement
- Stock on Hand (Inventory)
- Overprocessing
- Transportation
Eliminate the Waste

- 1/2 the human effort
- 1/2 the space
- 1/2 the equipment
- 1/2 the inventory
- 1/2 the investment
- 1/2 the engineering hours
- 1/2 the product development time

....then eliminate 1/2 again
The Big Question

What would you do if you had NO more......

- Money
- People
- Machines
- Computers
- Transportation
- New Facilities
Learn by Doing

“Hearing 100 times is not as good as seeing once. Seeing 100 times is not as good as doing once.”

Taiichi Ohno
Swing for the fences... or learn to bunt?
Engaging in Solutions

Change requires a light bulb going on in everyone’s head

Simulate

Model

Prototype

Test

Photos Courtesy of The Boeing Company
Making It Flow

The system is the product of the people’s efforts

- Creating Capacity
- Improving Quality
- Engaging Employees
- Involving Customers
Leadership Challenge

“If you do not know how to ask the right questions, you discover nothing.”

Dr. Edwards Deming
Leaders As Teachers

“When the problem is clearly understood, improvement is possible.”

- Go, See, and Learn
- Ask Questions Instead of Providing Solutions
- Encourage Innovation
- Foster Trust and Engagement
- Demonstrate Commitment and Understanding
- Turn Up the Heat
- Create a Workplace Where Continuous Improvement Becomes a Way of Life
You Can Be A . . . .

- Change Initiator
- Change Implementer
- Change Adopter
“Having the spirit to endure the training is the first step on the road to winning.”

-- Taiichi Ohno
A Parting Thought

Lean is not a manufacturing tactic or a cost reduction initiative. It’s a management system that applies to all organizations. It requires courage, conviction, willingness to take risk and a “leap of faith”. 