



# **Lean Principles for Building Reuse**

BMRA Webinar

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# Lean Portland

Mission:

**Help people make work better**



2018 summary:

- 25 educational and networking events
- 2 new social media channels maintained (YouTube and Podcasts)
- 1,000 people impacted
- 250 volunteer hours donated
- \$840 dollars in profit



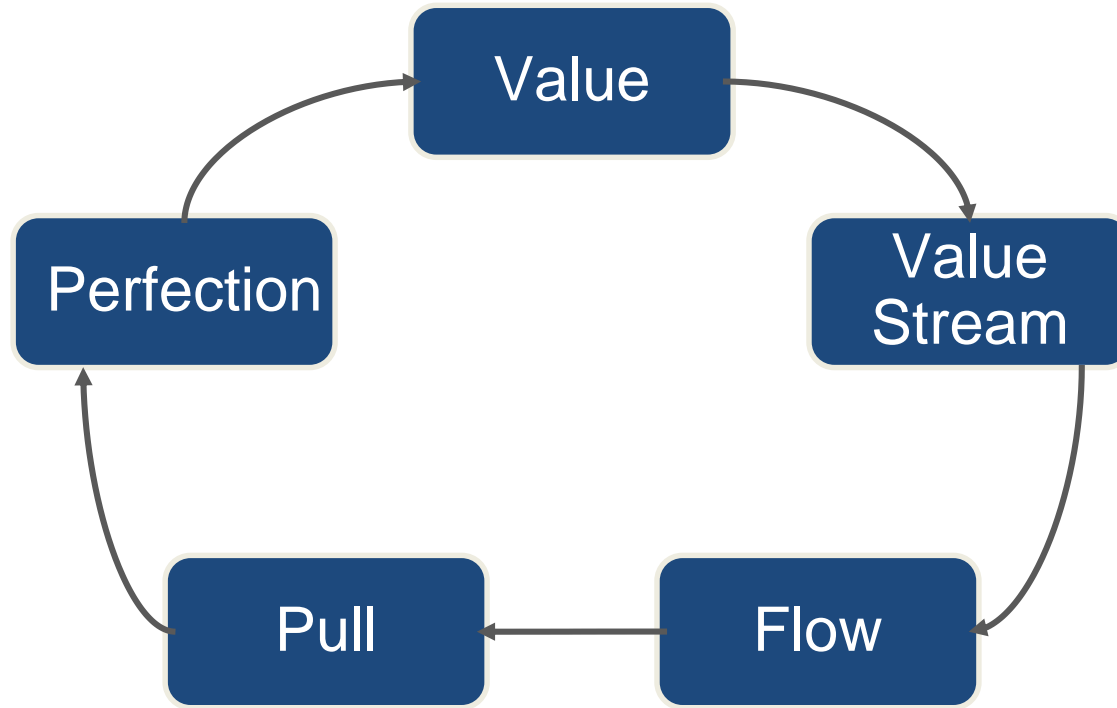
# What is Lean?

- Term used to describe Toyota Production System (TPS)
- MIT study mission (1991) to study TPS to understand automaker success
- Key focus is to engage employees with respect in identifying and solving problems at the work area (gemba), not just being more productive
- Work smarter and more flexible to grow, NOT work harder with fewer people
- The ultimate goal is to maximize customer value by minimizing waste between the processes, then free up resources to add more value to customer
- Processes must operate as a system (team), not dept or individual successes

# Benefits of Lean to You

- Employee and volunteer engagement
- Faster time getting donation through facility
- Smaller square footage
- Less inventory
- Less wasted time
- Less errors and mistakes
- Problems become more visible
- Flexible workers to handle demands
- Reduced expenses and costs
- Increased value and satisfaction to customers and stakeholders

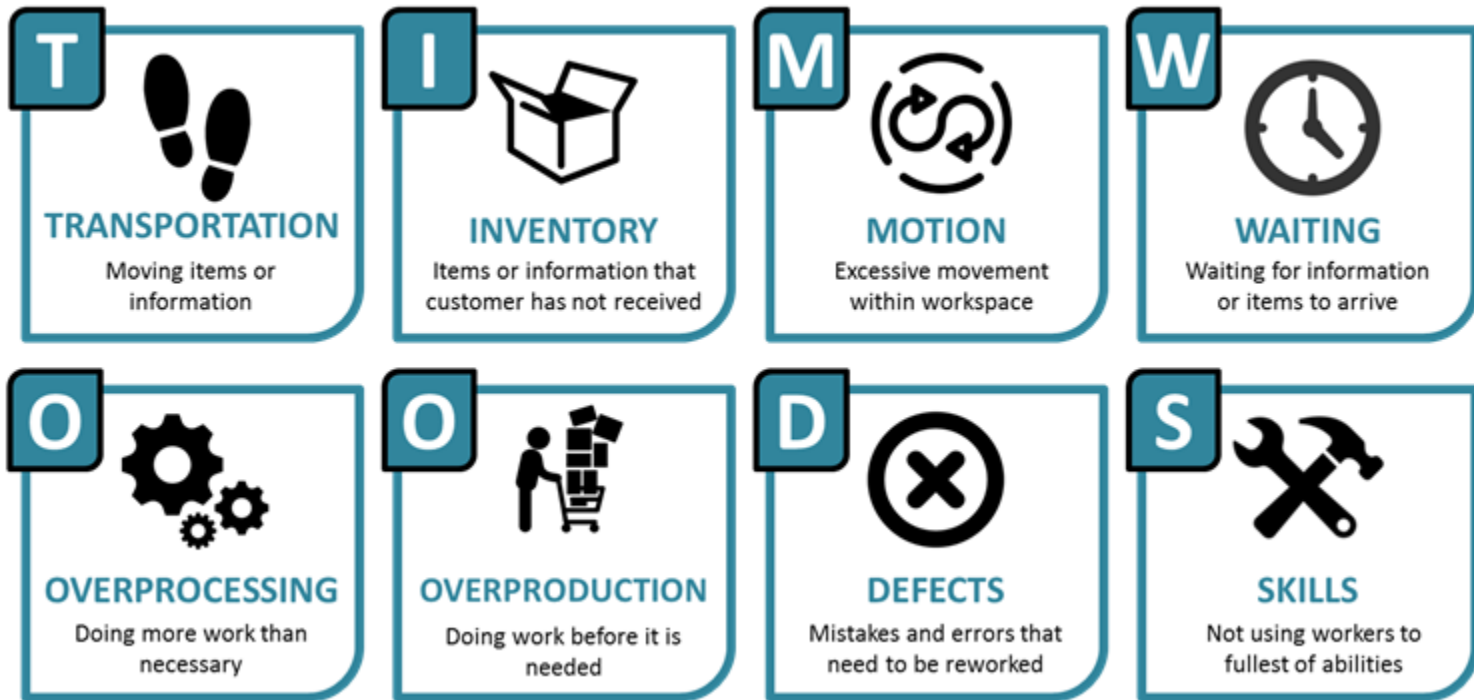
# Lean Principles



# Value Stream

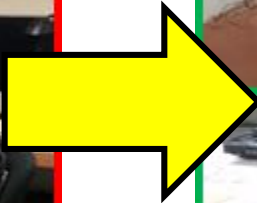


# Have you seen TIM WOODS?



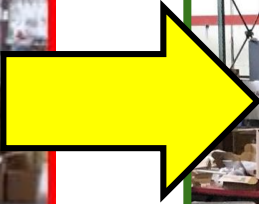


# Overproduction (eWaste)

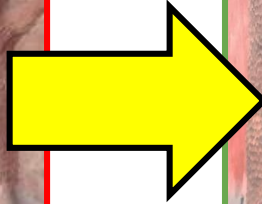
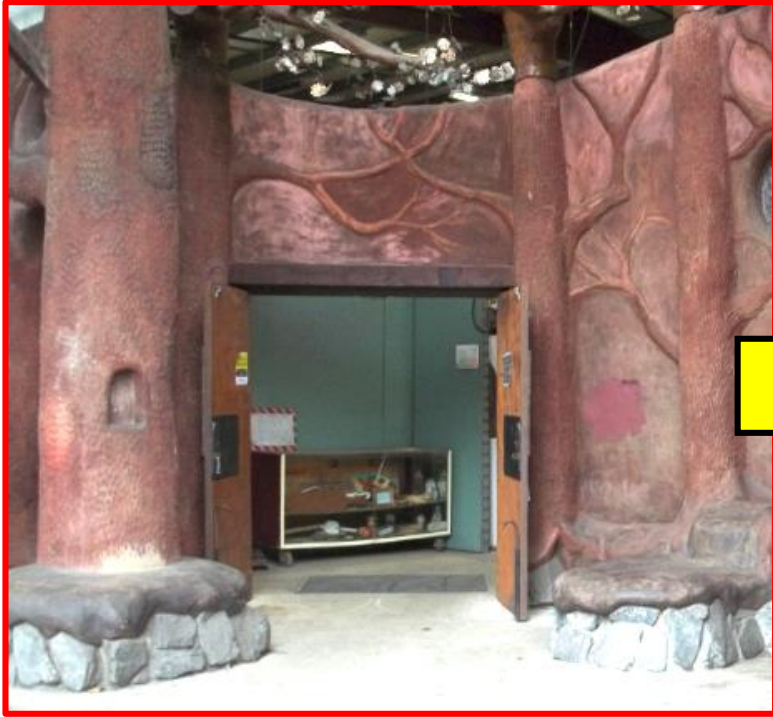




# Checkout Area



# Main Entrance



# Main Entrance

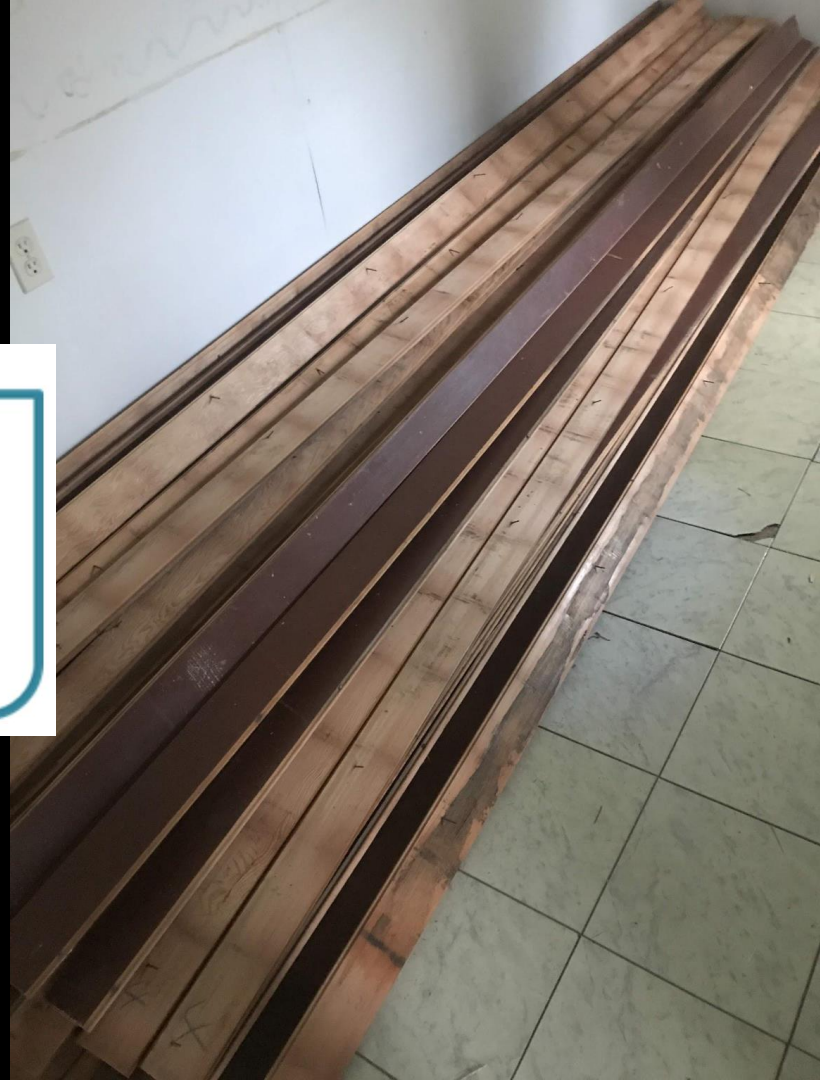




# Wastes at a Decon site

Matt Horvat





# Do a Waste Walk!

## Stagnation

Inventory, Waiting, Overproduction,  
Overprocessing, Defects

Stuff we don't take

## Movement

Motion, Transportation

Pile in garage  
Truck not equipped  
to tx all mat'l

## Skills

Jobsite heater  
Power on jobsite  
lighting



# Safety Stations & Organization!





# Shopping reclaimed material







REC-1  
 FURNITURE GRADE  
 CLEAR VERTICAL GRAIN  
 OR MIXED GRAIN; CLEAR OF  
 KNOTS IN 4' SECTION;  
 INDICATIVE OF OLD GROWTH  
 TREES FROM ANCESTRAL  
 FORESTS; TIGHT GRAIN  
 STRUCTURE

REC-2  
 FURNITURE, STRUCTURAL  
 : TRUE  
 DIMENSION; MILLED  
 AROUND THE TURN OF  
 THE LAST CENTURY.  
 OFTEN ON SITE; INDICATIVE  
 OF OLD GROWTH TREES FROM  
 ANCESTRAL FORESTS

# RECLAIMED LUMBER

	REC4	REC3	REC2	REC1
2x4	.15	.35	.60	.85
2x6	.25	.50	1.20	1.50
2x8	.35	.85	1.60	2.25
2x10	.55	1.25	2.00	3.25
2x12	.70	1.50	2.50	4.00
4x4	.50	.85	2.00	3.50
4x6	.85	1.25	3.00	.
4x8	1.00	1.65	3.25	.
4x10	1.50	2.10	5.40	.
4x12	1.70	2.50	7.20	.
6x6	1.50	2.00	5.40	.
6x8	1.90	2.75	7.20	.
6x10	2.75	4.50	9.00	.
6x12	3.50	6.00	11.00	.
8x8	4.00	5.25	9.00	.

ALL PRICES PER LINEAR FOOT ~ LNFT

Additional charge for lengths over 22' foot

HISTORIC  
 1x  
 AND UNDERLAYMENTS

1x3	.50
1x4	.60
1x6	.70
1x8	.80
1x10	2.00
1x12	2.50

REC-3  
 WOODWORKING, STRUCTURAL  
 TIGHT GRAIN WITH  
 KNOTS; CLOSE GRAIN  
 STRUCTURAL; INDICATIVE  
 OF OLD GROWTH AND  
 SECOND GROWTH TREES

REC-4  
 ECONOMY STRUCTURAL LUMBER  
 MODERN DIMENSIONS;  
 MILLED FROM FAST  
 GROWING IMMATURE  
 TREES



**REBUILDING CENTER**  
REBUILDING COMMUNITY THROUGH REUSE

**WELCOME!**

1. Find your treasure
2. Place yellow hold tag on item
3. Get a price ticket from a Salvage Specialist
4. Bring ticket to cashier (and pay)
5. Pick up items at drive-up



# CEDAR

~ ALL PRICES PER LINEAR FOOT ~ LNFT

1X		7/8	5/4
1 x 2	.15	.15	.20
1 x 3	.25	.30	.35
1 x 4	.30	.35	.40
1 x 6	.50	.55	.60
1 x 8	.70	.75	.85
1 x 10	1.00	1.10	1.20
1 x 12	1.25	1.35	1.50



## LUMBER!

2x2	.25
2x4	.75
2x6	1.25
2x8	1.75
2x10	2.10
2x12	2.75
4x4	2.00
4x6	3.50
6x6	6.00

## SIDING

BEVELED CHANNEL

6"	.45	.50
8"	.60	.75
10"	1.00	.85

## BEADBOARD!

4"	.50
6"	.75
8"	1.00



ENTER ON  
FREMONT

— ♦ —  
ReBUILDING CENTER



# Principles of Improvement at Rebuilding Center

Work within existing constraints

Do projects that staff support

Don't do everything needed

Do things with permanence



# Questions/Comments?

Thank you!

Contact Brion and Matt at [LeanPortland.com](http://LeanPortland.com)

Contact Kelly and Chris at [RebuildingCenter.org](http://RebuildingCenter.org)