Michigan Technological University’s journey towards zero waste in Dining Services

**Controlling Pre-Consumer Waste**
- 2012 – Lean Path Waste Tracking System involves all kitchen staff
  - Weigh pre-consumer food waste
  - Record food type and reason for disposal
- Changes made based on data collected; for example, food remaining is now made available between meal periods
- Decrease in overproduced foods leading to $40,000 per year in savings

**Recycling**
- Eliminated Styrofoam usage
- 600 pounds or more recycled daily
  - Metal cans, plastics number 1 and 2, cardboard
- Cardboard compactor

**Fryer Oil Improvements**
- No longer change fryer oil each week “just because”
- Now test oil each week and only change when necessary
- $5,000 in annual savings
- Upgraded to Michigan-made oil from Zoye Oil Company
  - Plant is powered by methane from landfills
  - Bio-diesel powered trucks to deliver oil
- Local company to pick up used oil to convert to bio-diesel

**Future Ideas**
- Composting
  - Industrial size composter
  - Reduces 600 lbs. of waste to the volume of 2 five gallon buckets
- University Vegetable Garden
  - Fresh fruit and vegetables
  - Expanding to all dining locations
- Bio-diesel powered delivery trucks
- Pulpers in all dining locations (Currently one in Wadsworth)
  - Takes liquid out of waste, reducing amount sent to landfill

**Lean Culture: Including People in the Process**
- Stop Waste Action Team (SWAT) Meetings
  - All cafeteria managers meet once per week
  - Best practice sharing - department-wide improvements
- Daily Team Meetings
  - Implement improvements
  - Discuss metrics
- Student Led Improvements
  - Suggestions from all levels
  - Empower all employees to be involved in improvements
- Culture and practices that allow all staff to voice concerns