WHY DO A WASTE AUDIT?

- **Identify the composition of our waste**
- **Identify and prioritize specific opportunities to reduce, reuse, and recycle more**
- **Identify barriers to waste diversion**
- **Develop strategies to divert specific items**
- **Compare with past data to measure progress toward 2020 goal**
  - **2020 Goal = Divert 60% of waste from landfill**
PAPPAJOHN BUSINESS BUILDING BACKGROUND

- **Gross Square Feet** – 228,888
- **Year Built** – 1993
- **Number of Stories** – 4
- **Building Use** – Administrative, Classroom, Events, Retail Dining
- **FY17 Recycling** = 36,421 lbs
- **FY17 Landfill/Trash** = 71,950 lbs
- **FY17 Diversion Rate** = 34%
FY17 CAMPUS WASTE

- FY17 RECYCLING = 4,476,605 LBS
- FY17 ORGANICS/COMPOST = 872,837
- FY17 LANDFILL/TRASH = 11,293,262 LBS
- FY17 TOTAL WASTE = 16,642,704

CAMPUS DIVERSION RATE
- 32% WITH HOSPITAL
- 40% WITHOUT HOSPITAL
WASTE AUDIT PROCESS

- Custodial staff collected and saved trash from their regular cleaning schedule.
- Trash collected from office spaces and lounge areas.
- Each trash bag was tagged by location.
- Sorting tables were set up on T. Anne Cleary Walkway.
- Conducted two shifts (1 hour each shift).
- Approximately 15 Tippie student volunteers for each shift.
  - Business Process Analysis class (Michael Altemeier), Enactus at Iowa, Net Impact.
- Shift 1 sorted bags from all lounges, shift 2 sorted bags from 3rd floor office areas.
- Contents sorted into 18 categories.
- No time to sort other bags.
- No bags collected from restrooms or Pat’s Diner.
- 80 lbs of waste were sorted, which represents approximately 30% of trash generated per day at PBB.
<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>LOUNGE (LBS)</th>
<th>LOUNGE %</th>
<th>3RD FL OFFICES (LBS)</th>
<th>3RD FL OFFICES %</th>
<th>TOTAL (LBS)</th>
<th>TOTAL %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cartons/Aseptic</td>
<td>0</td>
<td>0%</td>
<td>0.2</td>
<td>1%</td>
<td>0.2</td>
<td>0%</td>
</tr>
<tr>
<td>Cardboard</td>
<td>1.6</td>
<td>3%</td>
<td>0.6</td>
<td>2%</td>
<td>2.2</td>
<td>3%</td>
</tr>
<tr>
<td>Electronics</td>
<td>0.4</td>
<td>1%</td>
<td>1.2</td>
<td>3%</td>
<td>1.6</td>
<td>2%</td>
</tr>
<tr>
<td>Glass (non redeemable)</td>
<td>4.0</td>
<td>9%</td>
<td>0.6</td>
<td>2%</td>
<td>4.6</td>
<td>6%</td>
</tr>
<tr>
<td>Liquid</td>
<td>7.4</td>
<td>16%</td>
<td>0</td>
<td>0%</td>
<td>7.4</td>
<td>9%</td>
</tr>
<tr>
<td>Metals (non redeemable)</td>
<td>1.0</td>
<td>2%</td>
<td>0.4</td>
<td>1%</td>
<td>1.4</td>
<td>2%</td>
</tr>
<tr>
<td>Paper</td>
<td>6.8</td>
<td>15%</td>
<td>7.6</td>
<td>22%</td>
<td>14.4</td>
<td>18%</td>
</tr>
<tr>
<td>Plastics (non recyclable)</td>
<td>1.0</td>
<td>2%</td>
<td>1.4</td>
<td>4%</td>
<td>2.4</td>
<td>3%</td>
</tr>
<tr>
<td>Organics</td>
<td>5.8</td>
<td>13%</td>
<td>8.6</td>
<td>25%</td>
<td>14.4</td>
<td>18%</td>
</tr>
<tr>
<td>Paper cups</td>
<td>1.8</td>
<td>4%</td>
<td>2.8</td>
<td>8%</td>
<td>4.6</td>
<td>6%</td>
</tr>
<tr>
<td>Plastic bags/film</td>
<td>4.8</td>
<td>10%</td>
<td>3.8</td>
<td>11%</td>
<td>8.6</td>
<td>11%</td>
</tr>
<tr>
<td>Plastics (recyclable)</td>
<td>4.5</td>
<td>10%</td>
<td>3.2</td>
<td>9%</td>
<td>7.7</td>
<td>10%</td>
</tr>
<tr>
<td>Glass (redeemable)</td>
<td>1.2</td>
<td>3%</td>
<td>0.0</td>
<td>0%</td>
<td>1.2</td>
<td>1%</td>
</tr>
<tr>
<td>Metal (redeemable)</td>
<td>1.0</td>
<td>2%</td>
<td>0.6</td>
<td>2%</td>
<td>1.6</td>
<td>2%</td>
</tr>
<tr>
<td>Plastics (redeemable)</td>
<td>1.4</td>
<td>3%</td>
<td>0.6</td>
<td>2%</td>
<td>2.0</td>
<td>2%</td>
</tr>
<tr>
<td>Landfill/Trash</td>
<td>3.0</td>
<td>7%</td>
<td>2.8</td>
<td>8%</td>
<td>5.8</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>0.0</td>
<td>0%</td>
<td>0.0</td>
<td>0%</td>
<td>0.0</td>
<td>0%</td>
</tr>
<tr>
<td>Total</td>
<td>45.72</td>
<td></td>
<td>34.4</td>
<td></td>
<td>80.12</td>
<td></td>
</tr>
</tbody>
</table>
Waste Composition Comparison

- **2015 REPORT**
  - Recyclable at UI: 32%
  - Compostable: 29%
  - Landfill: 38%

- **PBB AUDIT TOTAL**
  - Recyclable at UI: 37%
  - Compostable: 18%
  - Landfill: 45%

- **PBB 3RD FL OFFICE**
  - Recyclable at UI: 38%
  - Compostable: 25%
  - Landfill: 37%

- **PBB LOUNGES**
  - Recyclable at UI: 36%
  - Compostable: 13%
  - Landfill: 52%

**2015 REPORT**

- Recyclable at UI: 32%
- Compostable: 29%
- Landfill: 38%

**2017 PBB AUDIT TOTAL**

- Recyclable at UI: 45%
- Compostable: 18%
- Landfill: 37%

The Waste Composition Comparison shows the distribution of waste into categories such as Recyclable at UI, Compostable, and Landfill for different areas and reports.
KEY FINDINGS FOR RECYCLING

• 37% of what’s in PBB’s trash is recyclable at UI
• Most recyclable material in the trash is paper
  • 22% in office areas
  • 18% in lounge areas
• Second most recyclable material in the trash is plastic
  • 11% in office areas (includes redeemable)
  • 13% in lounge areas (includes redeemable)
• Cardboard accounts for 3% of the trash
  • 2018 landfill cardboard ban
KEY FINDINGS FOR ORGANICS

- Organics account for 18% of the trash
- 13% in lounge areas
- 25% in office areas

PBB WASTE COMPOSITION
KEY FINDINGS FOR TRASH

- 45% of what’s in the trash is not easily recyclable at UI
- Plastic bags/film account for 11% of the trash
- Liquids left in bottles/cans/cups account for 9% of the trash
  - 9% in lounge areas
  - 0% in office areas
- Paper cups account for 6% of the trash
  - 4% in lounge areas
  - 8% in office areas
- Only 10% of the trash is truly trash
### What Happens If We Recycle Everything Currently Recyclable at UI?

<table>
<thead>
<tr>
<th>WASTE CATEGORY</th>
<th>PBB WASTE IN FY17 (LBS)</th>
<th>WASTE PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling</td>
<td>36,421</td>
<td>34%</td>
</tr>
<tr>
<td>Compost/Organics</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Landfill Trash</td>
<td>71,950</td>
<td>66%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>108,371</td>
<td>100%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WASTE CATEGORY</th>
<th>POTENTIAL WASTE (LBS)</th>
<th>WASTE PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycling</td>
<td>62,931</td>
<td>58%</td>
</tr>
<tr>
<td>Compost/Organics</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Landfill Trash</td>
<td>45,440</td>
<td>42%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>108,371</td>
<td>100%</td>
</tr>
</tbody>
</table>
FINDINGS & RECOMMENDATIONS

- **Focus on getting all recyclable paper, plastics, and cardboard out of the trash**
  - Survey building occupants to identify barriers preventing recycling
  - Evaluate waste receptacles for physical barriers preventing recycling
  - Evaluate waste receptacle labels, signage, and placement
  - Make improvements to waste receptacles, labels, signage, and placement identified during evaluation
  - Develop and implement a comprehensive outreach & education campaign focused on recycling paper, plastics and cardboard
FINDINGS & RECOMMENDATIONS

- Focus on getting all liquids out of the trash
  - Survey building occupants to identify factors contributing to liquid waste
  - Evaluate waste receptacles to identify opportunities for discouraging liquid waste
  - Evaluate waste receptacle labels, signage, and placement
  - Develop and implement a comprehensive outreach & education campaign focused on liquid waste and target lounge areas
  - Make improvements to waste receptacles, labels, signage, and placement identified during evaluation.
FINDINGS & RECOMMENDATIONS

• **Focus on reducing plastic bag use**
  
  • **Eliminate the need for desk-side plastic bag liners by implementing tiny trash**
  
  • **Work with custodial staff to develop a policy on emptying trash cans that allows liners to be reused if clean.**
Findings & Recommendations

- Focus on reducing paper cup use
- Work with Pat’s Diner to promote and incentivize the use of refillable coffee mugs
FINDINGS & RECOMMENDATIONS

• Begin developing a plan to address organic waste
  • Collaborate with Pat’s Diner
  • Identify opportunities for reducing organic waste
  • Identify opportunities for composting organic waste
### Recommendations & Impact

<table>
<thead>
<tr>
<th>Action</th>
<th>Extra Lbs Diverted Per Year</th>
<th>Diversion Rate from Action</th>
<th>Diversion Rate from Cumulative Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycle all recyclable paper</td>
<td>12,951</td>
<td>46%</td>
<td>46%</td>
</tr>
<tr>
<td>Recycle all recyclable plastics</td>
<td>8,634</td>
<td>42%</td>
<td>54%</td>
</tr>
<tr>
<td>Recycle all recyclable cardboard</td>
<td>2,158</td>
<td>36%</td>
<td>56%</td>
</tr>
<tr>
<td>Eliminate liquids from bottles/cans</td>
<td>6,475</td>
<td>36%</td>
<td>58%</td>
</tr>
<tr>
<td>Reduce plastic bag use by half</td>
<td>3,957</td>
<td>35%</td>
<td>59%</td>
</tr>
<tr>
<td>Reduce paper cup usage by half</td>
<td>2,158</td>
<td>34%</td>
<td>60%</td>
</tr>
<tr>
<td>Compost all organics</td>
<td>12,951</td>
<td>46%</td>
<td>72%</td>
</tr>
</tbody>
</table>
THANK YOU!

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319-384-3415