Travel: The Universal Inefficiency

E. Chris Buck
President
Productivity Enhancement Resources, Inc.

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PAPA RON'S
PIZZA
NO FOOTWEAR BEYOND THIS POINT
PLEASE PUSH THE BUTTON DURING YOU PEE
SAMBIL
DITEKAN TOMBOLONYA!
TOILET MAN
Travel: The Universal Inefficiency

• In Construction, Travel means movement of craft resources from Point A to Point B

• Craft travel can be broken down to:
  ► Traveling Empty-Handed
  ► Traveling with Tools and Materials
  ► Equipment Travel

• Without exception, Craft Travel categories represent the highest level of inefficiency regardless of client or location.
Travel: The Universal Inefficiency

• What does Travel cost Projects?
  ► Global Average is 20%
  ► Conservative Assumptions:
    • Project Schedule: 5x8 (5 days/week x 8 hrs/day)
    • Labor Population: 500
    • Avg/hr labor rate: USD $60.00

• Cost Analysis
  ► Total Labor Cost: Monthly USD $4,800,000.00 Annually USD $57,600,000.00
  ► Craft Travel Cost: Monthly USD $960,000.00 Annually USD $11,520,000.00
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Potential Savings Opportunities

<table>
<thead>
<tr>
<th>Craft Travel Reduction</th>
<th>Monthly Cost Savings (USD)</th>
<th>Annual Cost Savings (USD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Percentage Point (.5% Reduction)</td>
<td>$48,000</td>
<td>$576,000</td>
</tr>
<tr>
<td>2 Percentage Points (1% Reduction)</td>
<td>$96,000</td>
<td>$1,152,000</td>
</tr>
<tr>
<td>3 Percentage Points (15% Reduction)</td>
<td>$144,000</td>
<td>$1,728,000</td>
</tr>
<tr>
<td>4 Percentage Points (20% Reduction)</td>
<td>$192,000</td>
<td>$2,304,000</td>
</tr>
<tr>
<td>5 Percentage Points (25% Reduction)</td>
<td>$240,000</td>
<td>$2,880,000</td>
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</tbody>
</table>
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• Craft Travel primary causes:
  ► Resource Availability
  ► Logistics

• Craft Travel secondary causes:
  ► Coordination Activity
  ► Task Transition
  ► Craft Travel can also generate from Work Culture dynamics
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• Two Elements of Craft Travel to Manage:
  ► Duration
  ► Frequency

• Duration
  ► Projects tend to emphasize
  ► Primarily influenced by Logistics

• Frequency
  ► Tends to be the area that causes the most trouble
  ► More difficult to manage. Involves process changes to fix.
Travel: The Universal Inefficiency

• Address Craft Travel in the Project’s Productivity Plan
  ► Pre-mobilization Site Logistics Assessments
  ► Improve Foreman Availability
  ► Evaluate opportunities to reduce overall need to travel.
    o Tool/Material Runners and other process changes to eliminate the need for craft travel
    o Constructability Opportunities to Reduce Craft Travel
Summary

- Craft Travel on Jobsites is the #1 inefficiency regardless of industry or location.
- The Reasons for Craft Travel are Virtually the Same on Every Project.
- Managing Craft Travel Involves Addressing Both the Duration and Frequency.
- Projects Should Address Craft Travel in a Comprehensive Productivity Plan.