• CTA received at least a firm a month donating pro bono services
  • Some firms have donated more than one team
• 2007 contributions should be in excess of $2 million
Booz Allen: Performance Management launch:
- Establish metrics, targets, and improvement opportunities across operating units for safe, clean, on-time, courteous, and efficient

IDEO: Customer communication
- Identify specific actions and general themes for improving communication, from the perspective of different profiles of riders

Deloitte: Rail of the Future & Construction Mgmt.
- Develop principles for improving existing rights of way, based on proven and emerging technologies globally, and compare these costs to those of maintaining the current system
- Introduce best-practice and private-sector organizational structures for construction management
Katzenbach: Bus Cleanliness
• Increase bus cleanliness with new staffing model, processes, and tools

Huron: Control Center
• Simplify and standardize how the Control Center responds to a common disruption (rail door malfunction) in order to improve rail reliability and set a standard for accountability across Control Center operations

McKinsey: Turnaround Plan & Bus Maintenance
• Size and sequence the major initiatives needed to increase ridership substantially and eventually position CTA as a model transit agency
• Apply lean transformation techniques to improve the effectiveness and efficiency of bus maintenance
Lean Bus Operations
Objectives

1. Improve bus availability
   - Improve reliability through revised maintenance strategies
   - Optimize use of resources

2. Reduce garage maintenance costs
   - Reduce amount of repair work through better preventive maintenance
   - Increase efficiency in maintenance work execution

3. Reduce Bus Breakdowns
The Focus

How can we improve our processes & methods?

Which cultural elements/habits are critical to success?

How can leadership provide better support?
Comprehensive Diagnostic

Transformation Planning

Quick Win Implementation

Implementation in the Pilot Garage

Best Practice Roll Outs in all Garage

Weeks
Reconfigure Bus Workflow

Inspection

Lift

Oil Change

Radio Sys. Check

Trip

Setup 50 min

Bus tripped For follow up With backlog

Current

Radio check (outside)

Brake check (outside)

Staging Area

General Cleaning

Fare collect

Fueling

Washing

Bypass

Mechanic’s Path

External work

Trouble Track

Follow up

Stock

Stock Room

Lockers

Office
Grouping PM Tasks Into a Line

- Inspection
- Lift
- Oil Change
- Radio Sys. Check
- Follow Up: Completed, Bus Ready for Service

Mechanic’s Path

Setup 50 min
Reconfigure Bus Workflow

Current

• Steps Eliminated: 4 Trips
  • Time Saved: 200 Mins.

Future

• -100 % → 0 Trips
• -75 % → 50 Mins.
**Most Frequent Tasks Efficiency**

- Top 5 tasks account for 63% of PM hours

<table>
<thead>
<tr>
<th>Maintenance Hours</th>
<th>1,394</th>
<th>1,373</th>
<th>1,204</th>
<th>900</th>
<th>796</th>
<th>762</th>
<th>508</th>
<th>403</th>
<th>339</th>
<th>292</th>
<th>226</th>
<th>198</th>
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<tr>
<td>4,000 Mile Inspection</td>
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<td>Other 10 Tasks</td>
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</table>

- 25% of time can be saved by using a similar approach for all of top 5 tasks
4,000 Mile Inspection

Current

Front of bus

3,280 Ft. and 45 Mins.

Future

Tool cart

1,500 Ft. and 25 Mins.
Kitting

- Could involve multiple trips to the window

**Task given**

Look up part 1

Look up parts 2, 3

Look up part 4

Move to another task until part 4 is available

Task complete

some parts changed

Current

Trip

Trip

Trip

Trip

Back order

- Process involves 1 trip for each task

**Task given**

Look up kit A includes parts

Task Complete (all parts changed)

Future

Kit example:

Future

Task given

Look up kit A includes parts

Trip

Task Complete (all parts changed)
Increased Bus Availability Can Generates $

- Reducing Holds by 43% could enable retiring/replacing 21 buses

**Bus Holds**

- **Chicago Garage**
  - Admin (1): 9
  - Material & Engineering: 10
  - Shop: 13
  - Garage: 13
  - Vendor: 13

<table>
<thead>
<tr>
<th>Category</th>
<th>Current</th>
<th>Target</th>
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<td>Admin (1)</td>
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- Reduced by 43%
Bus Runs Held In

For Equipment:
- Aug-07: 1,047
- Sep-07: 566
- Oct-07: 120

89% decrease from Aug-07 to Oct-07

For Manpower:
- Aug-07: 839
- Sep-07: 610
- Oct-07: 552

34% decrease from Aug-07 to Oct-07
Concrete molds ready for pouring
Crews pouring concrete

Concrete half-ties curing in their molds
Red Line Slow Zone

Crews performing finishing work on half-ties
President’s Report
November 7, 2007