

Case Study 1: VA Maryland Healthcare System - Baltimore

- 100+ restrooms visited 3-7 times per day
- Pulling 800+ bags of restroom trash per day
- Waste Stream diversion target of 50% by 2020
- Currently sending paper towels to landfills

Pilot Restroom details:

Busy location: 2A-201, top of escalator next to elevators and Starbucks

Small footprint: 1 sink, 2 urinals, 2 stalls, 2 towel dispensers, 1 trash can

Highly visible: next to Starbucks, in traffic lane from lobby to canteen

High Service: Staff checks restroom 7 times/day

Case Study 1: Baltimore ecotrash® PTC®

”pre” and ”post” data :

	“Pre”	“Post”	Change
Trash Cans	1	0	
<u>ecotrash® PTC®</u>	0	1	
Trash pulls/day	3.5*	0.5	-3.0
Trash weight/day	4.7*	4.7	
Weight/pull (lbs./bag)	1.4	9.4	+8.0
Trash “runs”/day	2	0.5	-1.5
Restroom “checks”/day	7	3	- 4

ecotrash® PTC® reduced trash pulls by 3 per day 0 occurrences of paper towels on floor in “Post” period

* Baseline data adjusted for accurate comparison

Case Study 1: Baltimore VA Value Proposition

Cost of 1 compactor per day*	Savings in one day from one compactor
\$2.62	3 fewer trash can empties
	4 trips to “check” for paper towels on the floor
	Guests not hand compacting towels into trash cans
	7 fewer times workers picked-up paper towels off the floor <i>“It’s just clean in there with the compactor”</i> .
	9 fewer times workers needed to hand-compact
	1.2 miles of distance and travel time to dumpster, 5 minutes of elevator time

Case Study 2: Cleveland ecotrash® PTC®

Busy location: Restroom 1-B327 averaged 22 visitors every 30 minutes

Small footprint: 2 sink, 2 urinals, 2 stalls, 2 towel dispensers, 1 trash can, **2 hand dryers**



High Service: Frequent over-flows, Staff checks restroom 7 times/day

Case Study 2: Cleveland ecotrash® PTC®

adjusted data	“Baseline”	Projected	Change
Trash Cans	1	0	
<u>ecotrash® PTC®</u>	0	1	
Trash pulls/day*	2.4	0.54	-2
Trash weight/day*	5.4	5.4	
Weight/pull (lbs./bag)	2.3	10	7.7
Restroom “checks”/day	7	3	-4
Overflows/day	2	0	-2

ecotrash® PTC®

0 occurrences of paper towel on floor in “Post” period

Forecasted to save 1 pulls/day, and majority of Restroom “checks”

* Baseline data adjusted for accurate comparison

Case Study 2: Cleveland VA Value Proposition

Cost of 1 compactor per day*	Savings in one day from one compactor
\$2.62	2 fewer trash can empties
	4 trips to “check” for paper towels on the floor
	Guests from having to push towels into trash cans (hand compact)
	Workers no longer pick-up paper towels from the floor... <i>“it’s just clean”</i>
	7 fewer times workers needed to hand-compact

Case Study 3: Orlando-Lake Nona VAMC:

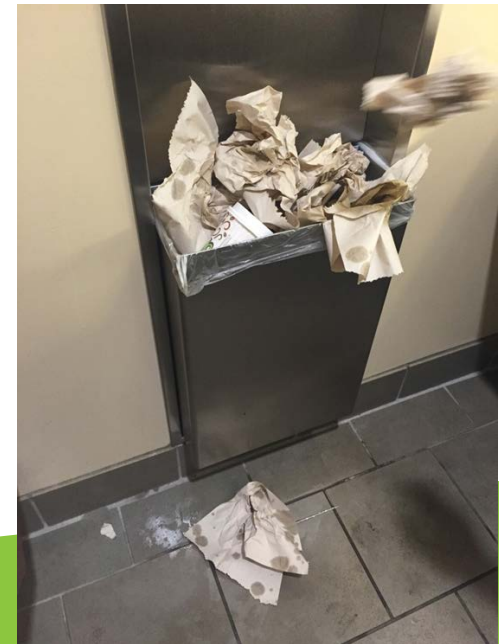
Busy location: Restroom between Cafeteria and Lab on Main Floor. Uses 4.0 lbs of paper towels per day.

High Visibility: Among highest volume locations used by guests and staff

Small footprint: 4 sink, 2 urinals, 2 stalls, 1 towel dispensers, 2 in-wall trash cans

High Volume:

- Averages 44 users/hour, peak of 63 users/hour.
- Trash can over-flows at least once per hour.
- Guests compact towels by hand.
- Staff checks restroom 5 times/day.



Case Study 3 ecotrash® PTC® Orlando

- Lake Nona "pre" and "post" data :

adjusted data*	"Pre"	"Post"	Change vs Baseline
Trash Cans	2	0	-2
<u>ecotrash® PTC®</u>	0	1	1
Trash pulls/day	5	0.5	-4.5
Trash weight/day	6.34	6.34	
Weight/pull (lbs./bag)	1.3 lbs	12.7 lbs	+11.4 lbs
Restroom "checks"/day	5	1	-4
Overflows/day	7	0	-7

ecotrash® PTC® reduced trash pulls by 4.5 /day

Eliminated hand compacting by guests and staff

* Baseline data adjusted for accurate comparison

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Case Study 3: Orlando Lake Nona: Results



Eliminated hand compacting by guests
Eliminated paper towels on floor
Reduced empties by 90%
Increased weight/bag by 669%



Positive feedback from guests and staff:

“The VA has some pretty impressive stuff. This looks space-age!” - Patient

“This will help so much!”
- Housekeeper

Case Study 4: Palo Alto

- Paper towels on the floor
- Two cans (one was necessary)
- Paper towels made up 99% of the waste
- Bags were being removed regardless of how full they were
 - Some bags weighed 0.5 (less than 50% full)



Case Study 4 Palo Alto ecotrash® PTC® "pre" and "post" data :

adjusted data*	"Pre*"	"Post"	CHANGE
Trash Cans	2	0	
ecotrash® PTC®	0	1	
Trash pulls/day	8	1	-7
Trash weight/day	7.5	7.5	
Weight/pull (lbs./bag)	0.9	7.5	+6.6
Restroom "checks"/day	4	1	-3
Overflows/day	4	0	-4

ecotrash® PTC® reduced trash pulls and eliminated paper towels on the floor

Projected savings/day: 7.25 pulls, 2 Restroom "checks", 2 overflows

* Baseline data adjusted for accurate comparison

Case Study 4: Palo Alto Results

- No paper towels on the floor
- 2 cans replaced by 1 ecotrash PTC
- Paper towels still made up 99% of the waste
- ecotrash PTC emptied **ONCE** at end of day
 - Could have gone 1.5 days



Case Study 4: Palo Alto Quotes

- “This will make trash duty much simpler” –
EMC Supervisor
- “This really shows that the VA is making an effort to ‘Go Green.’ I like it!” – VA employee
- “Wow, this looks very cool! Never thought I would say that about a trash can” – VA patient
- “It was the first thing I noticed when I came into this restroom; very sleek machine” –
Construction worker