



Waste Management

How Marriott Achieves Cost-Savings & Sustainability Goals



MARRIOTT



- ▶ Company Overviews
- ▶ Program Overview
- ▶ Q&A Session

AGENDA



APTIM

We are a leading environmental, resilience, and infrastructure firm.

2,700
Employees

\$1.9B
Revenue

44
Offices in the Americas

HEADQUARTERED
ON THE WATER CAMPUS
IN BATON ROUGE, LA



APTIM WHO WE SERVE

COMMERCIAL & INDUSTRIAL

▶ Hospitality

- ▶ Food & Beverage
- ▶ Retail & Logistics
- ▶ Manufacturing, Metals & Mining
- ▶ Petrochemicals
- ▶ Sports
- ▶ Solid Waste
- ▶ Advanced Technology



GOVERNMENT

- ▶ Federal
- ▶ State
- ▶ Local
- ▶ Municipalities
- ▶ Counties
- ▶ Cities
- ▶ Parishes



ENERGY

- ▶ Utilities
- ▶ Oil & Gas



Details

MI operates, franchises, and licenses hotel, residential, timeshare, and other lodging properties.

- More than 30 brands
- 144 countries
- Nearly 9,500 properties (managed and franchise)
- Nearly 237 million Marriott Bonvoy members globally

MARRIOTT WASTE STRATEGY

(“More data, better data”)

Serve 360 Goals for 2025

- By 2025, Marriott International will reduce waste from landfill by 45% (from 2019 baseline)
- Reduce food waste by 50% (from 2019 baseline)



Waste Challenges

- ▶ Waste different from other utilities
 - ▶ Short bill pay
 - Stop service
 - ▶ Visual, smells
 - ▶ Potential for health violations
 - ▶ Quality of Data (weights, transport, fates)
- ▶ Bill pay and data automation
 - ▶ Individual properties had to upload data
- General waste issues
 - Overages, contamination, erroneous billing
- Waste broker vs. waste administrators
 - Lack of transparency
 - Conflict of interest
- Temp workers
- Regulatory compliance

A group of four business professionals (three women and one man) are standing in an office environment, smiling at the camera. The woman in the foreground is wearing a beige blazer and holding a laptop. The man to her left is wearing a dark suit and tie. The woman to her right is wearing a dark blue blazer. The man in the background is wearing a blue shirt and tie. The background is a bright, modern office with large windows.

PROGRAM DEVELOPMENT

Confidential. Not to be copied, distributed, or reproduced without prior approval. © 2023 APTIM - All rights reserved.

PROGRAM OVERVIEW

Services include:

- Invoice payments
- All waste data imported to MESH Monthly
- Monthly invoice auditing
- Right-sizing/ Right-streaming
 - Waste data analysis provided for potential cost reduction measures
- Assistance for all compliance related items such as: organic waste, hazardous waste, recycling
- Other waste consulting (service, issues, invoices, equipment, etc)
- Procurement



Cass overview

Trusted With

\$90B+

In annual disbursements,
managed by over 1,100
employees

We Process & Pay

50M+

Invoices each year

- **245K** Invoices processed daily
- **45K** Vendors paid monthly
- **90** Countries serviced 24x7x365






Serving Businesses For

110+ Years

With consistent focus on
innovation & customer service



Member Bank

1906	1956	1994	2004	2012
Cass Bank 	Freight 	Utilities 	Telecom 	Waste 



BILLING

A comprehensive end-to-end process for managing utility transactions.

INVOICES

- Mail Handling
- Scanning
- EDI
- OCR
- Data Entry
- Missing Bills
- Shutoff Prevention
- Exception Handling

DATA

- Quality
- Verification
- Normalization
- Security
- Exchange

PAYMENTS

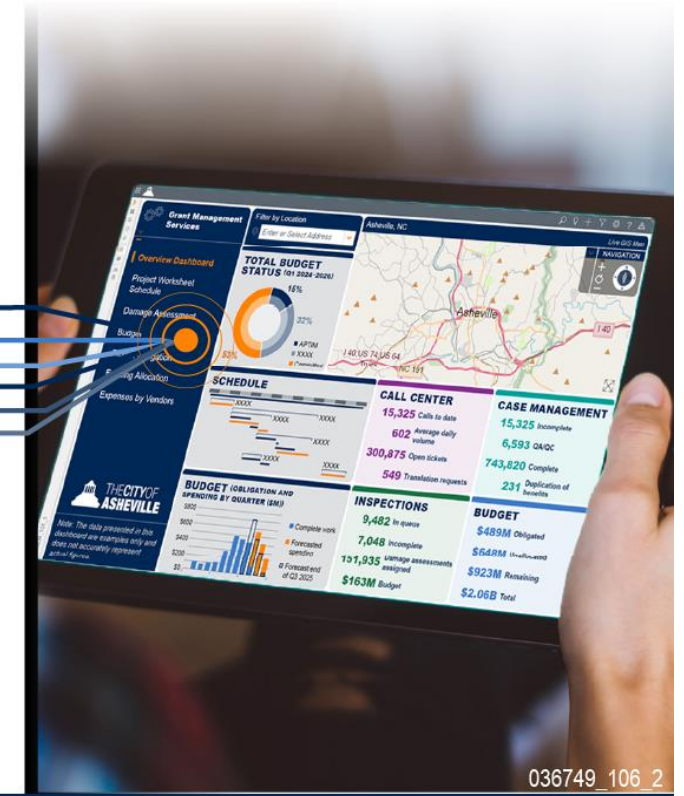
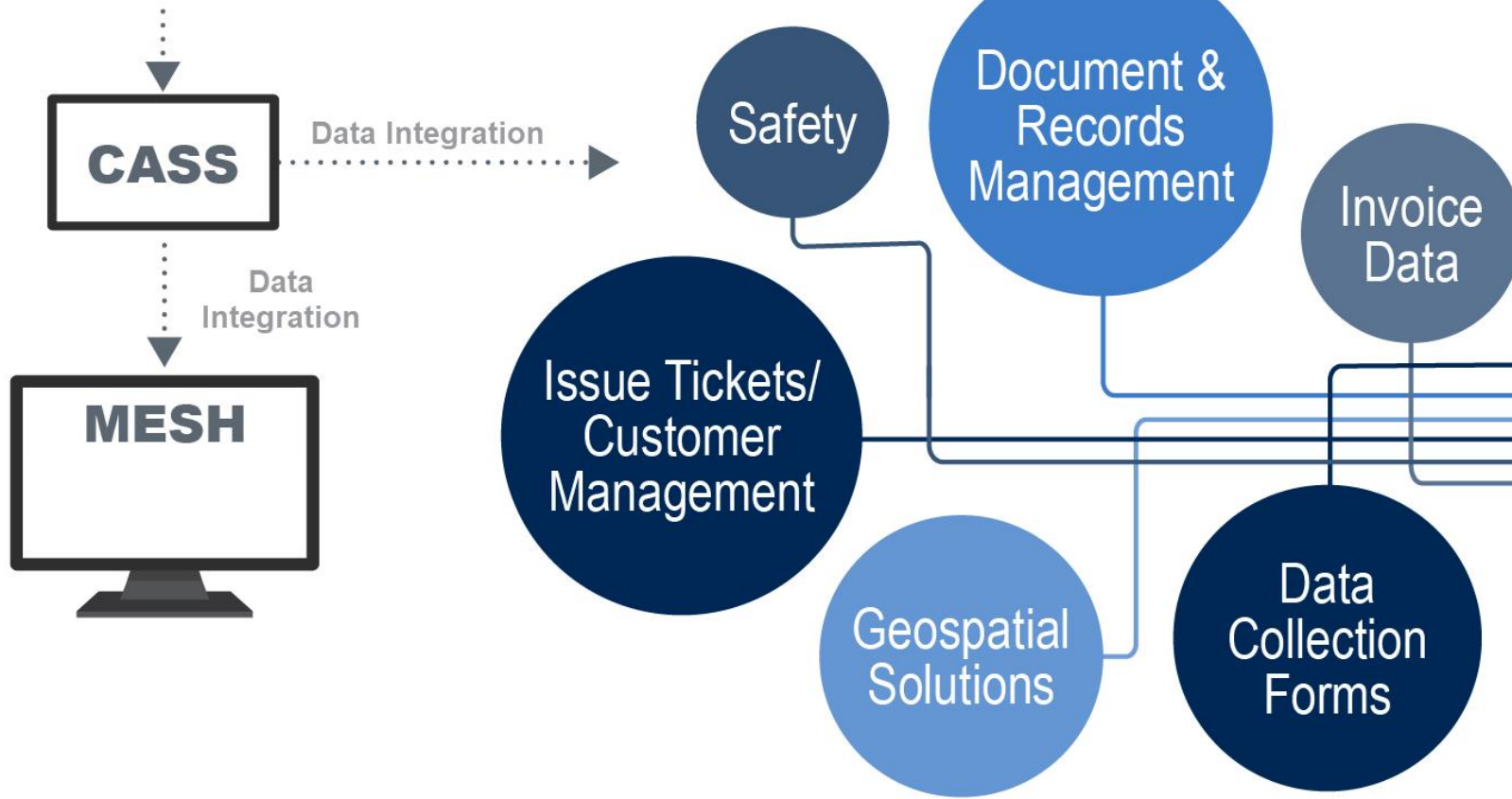
- ACH
- Checks
- Vendor Management
- Application
- Consolidation
- Accuracy

INFORMATION

- Data Feed
- Web Analytics
- GL or A/P Interfaces
- Accruals
- Process Reporting
- Performance Reporting

DATA MANAGEMENT SERVICES

Vendor Data



RIGHT-SIZING AND RIGHT-STREAMING

Right-Sizing

- The process of adjusting your waste collection services to match the amount and type of waste your business produces.

Right-Streaming

- Sorting and separating specific waste types to ensure proper Disposal Methods.
 - Solid Waste
 - Hazardous Waste
 - Electronic Waste
 - Organic Waste
 - Yard waste
 - Construction and Demolition

RIGHT-SIZING AND RIGHT-STREAMING

RIGHT-SIZING/STREAMING

- ▶ Current service levels
- ▶ Vendor rate sheets
- ▶ Contract reviews
- ▶ Available rebates

SCHEDULING

- ▶ Days and hours of operation (Service frequency)
- ▶ Seasonal flow

EDUCATION

- ▶ Container labeling and placement
- ▶ Employee training
- ▶ Posters, brochures, etc.

COMPLIANCE

- ▶ Regulatory tracking
 - ▶ Automated communications
- ▶ Contract audits

DATA MANAGEMENT

- ▶ Right service to volume ratio
- ▶ Streamline reporting

CONSULTING SERVICES

- ▶ Verify Regulatory Compliance
 - ▶ Solid Waste Audits
 - Onsite/Offsite/Certification
 - Data collection, tracking, and reporting
- ▶ EHS Compliance Obligation Checklist
- ▶ Support Waste Prevention and Diversion
 - ▶ Zero Waste Roadmap
 - Identify solutions to achieve sustainability goals



HAZARDOUS WASTE PROGRAMMING

- ▶ Driver
 - ▶ State and Federal regulatory compliance
 - ▶ Monetary fines and penalties
 - ▶ It's the right thing to do!
- ▶ Property Hazardous Waste Audits
 - ▶ Onsite review of activities and assets
 - ▶ Presentation of findings
 - ▶ Preparation of required permits and plans
- ▶ Waste Management Playbook (LSOP)
- ▶ Virtual Coaching by APTIM SMEs

HAZARDOUS & UNIVERSAL WASTE

WASTE COLLECTION AREA

The hazardous waste collection area (sometimes referred to as the accumulation area) is the **central location for the collection and storage of hazardous waste and universal waste** generated throughout the facility. The hazardous waste collection area will be the central location for the following:

- The Hazardous Waste Playbook
- Hazardous waste signage
- Containers holding hazardous and universal waste
- Spill clean-up supplies and fire suppression equipment
- Additional supplies including container labels, bags, extra containers, etc.

COLOR-CODED SYSTEM

The hazardous waste collection area will consist of several totes, buckets, and drums with color-coded hazardous waste labels designating the waste category. The color-coded labels correlate with waste characteristics and are intended to ensure proper segregation of hazardous waste. They also help prevent incompatible chemicals from mixing together. The hazardous waste categories and their abbreviations are listed below.

FLAMMABLES F Hazardous waste label: FLAMMABLE	CORROSIVE - BASES C Hazardous waste label: CORROSIVE - BASES	CORROSIVE - ACIDS C Hazardous waste label: CORROSIVE - ACIDS
AEROSOLS A Hazardous waste label: AEROSOLS	OXIDIZERS O Hazardous waste label: OXIDIZERS	STATE TOXICS S Hazardous waste label: STATE TOXICS

UNIVERSAL WASTE - BATTERIES, LAMPS, ELECTRONICS
U
Hazardous waste label: UNIVERSAL WASTE - BATTERIES, LAMPS, ELECTRONICS

SET UP THE WASTE COLLECTION AREAS

- Away from public traffic or high traffic areas
- Protected from the elements (e.g., should not be located on loading docks unless secured and protected)
- At least 3 feet away from the closest electrical panel and with at least a 3-foot clearance around the area
- Kept free of clutter and be accessible at all times (e.g., entrance is not blocked)

Once the facility has identified a central location for the hazardous waste collection area, it should set up the hazardous waste containers, spill kit, and other supplies in accordance with the **Planogram Diagram**. Properties should also set up Housekeeping and Kitchen satellite collection areas.

Housekeeping Satellite Area includes:

- Aerosols Container
- Flammables Container
- Stream Processing Instructions

Kitchen Satellite Area includes:

- Corrosive Bases Container
- State Toxics Container
- Stream Processing Instructions

©2022 MARRICOTT INTERNATIONAL, INC.

STATUS UPDATE

- ▶ What lessons were learned?
 - ▶ AP Integration
 - ▶ International Tax Requirements
- ▶ It works
 - ▶ Cost savings
 - ▶ Fewer issues
 - ▶ More data
 - ▶ More focus on-site staff and guests
 - ▶ Rolling out additional programming
- ▶ APTIM Team has scaled up
 - ▶ Learned how this hospitality client works internally vs. other clients





Q&A SESSION

CONTACTS

Christian Dettman, CHA

Hospitality Client Manager

Christian.Dettman@APTIM.com

720.234.2093

Mercedes Hunt, Ph.D

Director of Energy and Sustainability



An aerial photograph showing a wide, sandy beach with gentle waves lapping at the shore. The water is a deep teal color, and the sand is a light tan. In the foreground, a row of modern, multi-story houses with flat roofs and some swimming pools is visible, separated from the beach by a line of trees and shrubs. The overall scene is peaceful and scenic.

THANK YOU