



## Panic Button Turns to Equine Waste Alert: A High-Tech Solution to an Age-Old Problem

### How Charleston Keeps Its Cobblestone Streets Pristine While Horse-Drawn Carriages Traverse Its Historic Thoroughfares

Horse-drawn carriage tours are one of Charleston's signature industries, offering more than 40,000 tours annually.

During peak seasons, daily attendance can reach nearly 1,000 visitors, and cleanup crews work tirelessly to sanitize every "spill" within 20 minutes or less.

### The Challenge

Amy Southerland, Director of Livability and Tourism, faces a unique balancing act: preserving Charleston's historic charm while keeping residents happy amid heavy tourism.

One messy problem stood out — managing equine waste from dozens of horse-drawn carriages touring the city each day.

Despite the horses' diaper-style catch systems, liquid waste frequently reached the cobble streets, generating odors and resident complaints. With three carriage companies operating citywide, locating and cleaning up every spill was a constant challenge.

When traditional methods — such as flagging waste sites — failed to satisfy residents, Southerland and GIS Director Robert Hauck sought a smarter approach. They turned to **Vestige**, whose **PERSA safety device** was originally designed to protect isolated workers. Reimagined for this lighter-hearted purpose, it became a digital alert system for horse waste.

**“We’re very pleased with the way Vestige has served our community with this unique system and the way they continue to ensure it runs smoothly,”**

**—AMY SOUTHERLAND**  
DIRECTOR OF LIVABILITY



## From Panic Button to Equine Waste Tracker

Now, whenever a horse “spills,” the driver taps a **Vestige PERSA button**, instantly logging the GPS location and alerting a contracted cleanup crew.

- **Live view & cloud storage** – up to 30 days of instant, remote footage access.

**“The transition to a digital system has resulted in fewer complaints from residents,”**

**“People can even view real-time cleaning updates online —  
it’s helped us maintain both transparency and trust.”**

—AMY SOUTHERLAND

The improved system timestamps both the **report** and the **cleanup**, feeding into a public dashboard that tracks the city’s response time — an average of just **20 minutes**, managed by Charleston’s partner **Doody Calls**.

## The Technology Behind the Memory Making

Charleston’s carriage rides are a moving tableau of history — pastel homes, live oaks, Rainbow Row, and stories told by charming guides. Yet behind the romance lies modern technology.

Hauck’s GIS team monitors carriage movement across five distinct zones to ensure an equitable flow of tours through residential streets. Using the same Vestige data that powers the cleanup alerts, they balance routes and publish a public-facing dashboard that visualizes activity across King Street, East Bay, Calhoun, and Murray Boulevard.



**“We use GIS technology to balance the needs of residents and visitors,”**

**“Everyone can see for themselves the number of trips and the responsiveness of our cleaning teams.”**

—ROBERT HAUCK  
GIS DIRECTOR

## Livability and Tourism: Balancing Business with Daily Responsibilities

Charleston's Livability & Tourism office handles everything from **residential standards** and **short-term rental compliance** to **health, sanitation, and abandoned vehicles**. The waste-tracking project fit squarely into this mission — protecting public health while preserving the city's beauty.

For **Vestige**, the initiative is a perfect expression of its mission:

- To support smarter, safer municipal operations through **real-time GPS** and **AI-powered insights**.

By integrating PERSA into Charleston's workflow, carriage operators can automatically log incidents, trigger cleanup alerts, and prove compliance — reducing public frustration and reinforcing the city's image of **cleanliness and accountability**.

## Vestige Innovation and Leadership

Twain McDougal, President of Vestige, said this creative repurposing of their technology captures what makes the company unique.

*"Rarely do two clients come to us with the same problem,"* McDougal said.

*"We pride ourselves on adapting to specific challenges — especially when our technology improves life for both residents and visitors."*

Vestige's platform integrates seamlessly with municipal systems, providing **advanced GPS tracking, AI-driven event detection, and real-time alerts**.

For Charleston, that means instant notifications to sanitation teams, fewer complaints, and cleaner, more beautiful streets.

## Beyond the Carriage Routes

Vestige's technology extends far beyond Charleston's horse patrols. Its fleet and people safety solutions power **transit agencies, sanitation fleets, emergency services**, and more — anywhere visibility and accountability matter.

Whether it's tracking waste collection, monitoring **wheelchair securement on buses**, or responding to **street-level incidents**, Vestige turns cameras and data into **smarter, safer public services**.

