

SOLUTION STUDY

Consistency, accuracy, and portability for the National Park Service Point-of-Sale

The National Park Service preserves unimpaired the natural and cultural resources and values of the National Park System for the enjoyment, education, and inspiration of this and future generations.

NPS operates more than **150 fee-collecting parks** (including national parks, monuments, recreation areas, historic sites and homes, lakeshores and seashores) located across 47 U.S. states, Puerto Rico and the U.S. Virgin Islands.

The Problem

Throughout NPS, the fee-collecting parks were using various point-of-sale (POS) technologies to record and collect fees, ranging from modern solutions to legacy cash registers and spreadsheets. As a result, the **processes and procedures could vary dramatically from park to park**. Seasonal employees who worked from one park to another would often have to be retrained on the POS system wherever they went.

Accurate and timely reporting is of vital importance to NPS, U.S. Department of Interior (DOI) agencies, and other departments of the federal government. **Cumbersome data collection** sometimes led to inconsistencies and inaccuracies, resulting in reporting delays of up to 30 days. Accounting for discounts was based on calculated estimates, so it was hard to know the true quantity of park passes sold.

















The Solution

Tenacious Ingenuity

Arctic IT was selected to build an enterprise POS solution that would enable NPS to achieve a more consistent and accurate method of fee collections and standardize reporting up to its stakeholders, including Congress. The system was developed using the Microsoft Dynamics 365 Commerce platform to unify the process for transactions across nearly all the fee-collecting parks.

The POS solution was built to operate at both fixed fee-collection points but can also be used in a portable manner using an offline tablet-based PC. This allows NPS staff to

- Take the fee-collection transactions to the visitor
- Reduce stress and waits from long park entrance lines

The first deployment took place on October 10, 2019, in Rocky Mountain National Park. Since, the new software has been enabled with contactless payments, which coincidentally allowed NPS staff to operate safely when the COVID-19 pandemic began in early 2020. As the park deployments spanned more than two years, park staff who had learned the new system and moved to other parks were able to accelerate user adoption. Simultaneously, the Park Service migrated from G-Suite to Office 365, which made collaboration for the project much easier with the more than 1,000 individuals involved with the NPS implementation at the parks.

The Results

The final deployment went live in August 2021 at Glen Canyon National Recreation Area. For the first time, the National Park Service is connected enterprise-wide for point-of-sale and reporting. The Park Service's reporting capabilities have vastly accelerated from up to 30 days to less than 24 hours, as the database refreshes every day and is accessible via a **Power BI** dashboard. Deploying the new system on Microsoft Windows devices connected to the DOI network also helps NPS meet security compliance for the federal government – data confidence realized.

The holistic approach of using Office 365 for back-office operations and Dynamics 365 for frontline operations streamlines work for NPS staff, who can now use a **single credential** across the board to securely access their accounts and services. The decision to build the POS system on the Dynamics 365 cloud platform gives park rangers the freedom of portability and can be enabled for mobile fee collections in the future.







 Ensure fee collection compliance throughout the park \$0.00 Arctic IT also developed a **hybrid version** that can connect to standard POS peripherals, e.g., a cash drawer, for parks where there is electrical power but no network connectivity. Further, some parks have capacity limits for tours and events, so a tracker was custom coded for Commerce to provide NPS visibility and control of limited capacity availability in real time.



