

NUCLEUS  
RESEARCH

ROI: 116%  
Payback: 1.2 Years

# CELLEBRITE

## NAMPA PD

### ANALYST

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### THE BOTTOM LINE

The Nampa, Idaho Police Department achieved a 116 percent ROI upon implementing Cellebrite's Guardian and Pathfinder products, with a payback period of just over one year. Previously reliant on a combination of lightweight digital forensics tools and manual data extraction, storage, and distribution processes, the agency needed feature-rich solutions that would drive efficiency across its digital evidence workflows. Upon deploying Guardian and Pathfinder, the agency was able to retire more than \$13,000 in annual hardware and software costs and accelerate the extraction, sharing, and analysis of evidence data, translating to \$85,500 in annual time savings. Overall, the software has enabled a more modern approach to law enforcement, helping the agency serve its community more effectively.

## THE AGENCY

The Nampa Police Department is located in the city of Nampa in Canyon County, Idaho. The city has experienced steady population growth, and the Police Department currently has 150 sworn law enforcement officers. The agency's mission is to respectfully protect and serve the community through integrity, teamwork, and excellence.

## THE CHALLENGE

The Nampa Police Department previously used a combination of lightweight digital forensics solutions that presented challenges in data extraction. For example, one tool was supposed to extract evidential data from unlocked devices, such as phones, but was limited by date and time ranges. Additionally, extracted data was stored in hard drives that needed to be replaced once a year. To provide data access to neighboring agencies, evidence had to be uploaded to flash drives and physically distributed. For evidence analysis, seized devices had to be opened in separate windows. This made it difficult to make connections between sources of evidence and led to significant amounts of time spent toggling back and forth between different tabs.

As Android and Apple devices became increasingly advanced in their security, the agency's prior data extraction methods became less effective. However, as the city's population base expanded, so did the agency's forensics lab and the need for more modern forensics technology to protect and serve the Nampa community most effectively.

**Cost : Benefit  
Ratio** | **1 : 1.9**

## THE STRATEGY

The Nampa Police Department ultimately selected Cellebrite's Guardian and Pathfinder products to streamline its evidence extraction and analysis processes. Guardian is built to help manage, review, and share evidence securely, and Pathfinder provides a platform for necessary parties to analyze evidence from multiple sources. The agency's prior experience with other Cellebrite products that served different law enforcement needs drove the decision. Additionally, neighboring agencies already used Guardian and Pathfinder, driving the need to "come together as a county" and use the same platforms to make data sharing as seamless as possible.

The implementation of Guardian and Pathfinder was minimally disruptive, as Cellebrite provided resources for the deployment. Before the rollout, one IT employee spent approximately one workday setting up firewall access for Pathfinder and upgrading the agency's internet service. User training included a four-hour block on the initial rollout day, with an additional full day specifically focused on Guardian. These trainings were comprised of a combination of analysts and full-time detectives from Nampa PD and other agencies. The agency also took advantage of an analysis training class offered by the vendor. Regular updates are required to log into the Pathfinder server on an ongoing basis. However, they are typically completed automatically.

## TYPES OF BENEFITS



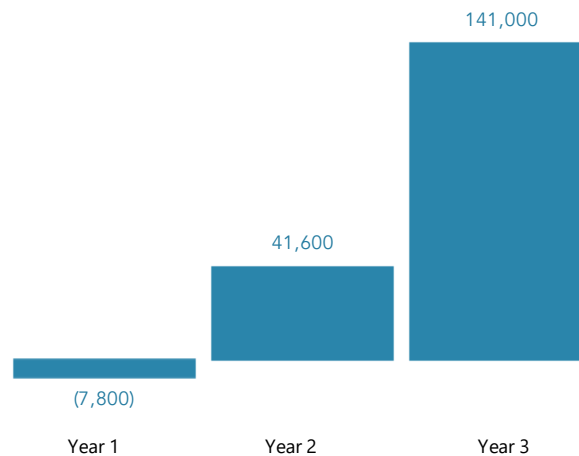
## KEY BENEFIT AREAS

Key benefit areas seen as a result of the Cellebrite deployment include retired legacy solution and hardware costs, as well as case time savings driven by more efficient data sharing through Guardian and data consolidation through Pathfinder.

- **Retired costs.** Upon implementing Guardian and Pathfinder, Nampa PD was able to retire both hardware and software costs associated with its previous methods of forensic analysis. For example, the agency offloaded the subscription costs of standalone tools it was using and no longer has to replace hard drives as they become full or servers that go down. Nucleus found that the implementation of Cellebrite enabled the agency to avoid \$13,900 in combined annual software and hardware costs. While the organization keeps some servers as backups, it has not experienced any issues being in the cloud with Cellebrite.
- **Time savings from Guardian.** The use of Guardian enabled Data Extraction Analysts and Detectives to spend less time making and physically distributing flash drives to give necessary parties, such as investigators and prosecutors, access to evidence. The solution instead enables data to be accessed through a web interface instantaneously. Nucleus found this saved these employees approximately two hours per day previously spent putting together and transporting flash drives, translating to labor cost savings of \$35,100 annually. This has also helped to accelerate cases; for example, data can be accessed as soon as it is extracted. Meanwhile, previously, if the computer was being used to upload evidence to a flash drive, it could not be used for analysis.

- **Time savings from Pathfinder.** Pathfinder’s ability to consolidate data from seized devices or social profiles within a single interface contributes to significant case time savings for Nampa PD. The agency currently has seven active cases within Pathfinder, through which detectives experienced an average four-week acceleration compared to cases that did not use Pathfinder. Nucleus found that this saves the agency approximately \$50,400 annually, with the benefit expected to increase as the use of the product expands to more cases.

## CUMULATIVE NET BENEFIT



## KEY COST AREAS

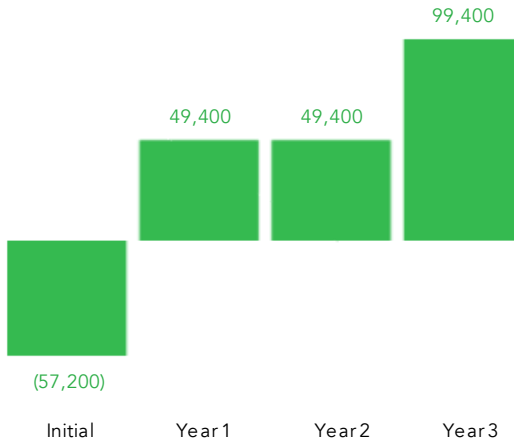
The primary cost areas of the Cellebrite deployment include the annual license cost for Guardian and Pathfinder, IT personnel time spent on implementation, time spent training employees on the solutions, and the cost of the additional training class. All hardware required for this deployment was included in the annual licensing cost.

## LESSONS LEARNED

This project highlights the importance of having modern solutions in place to meet evolving challenges in the law enforcement landscape. The speed at which evidence is made available to necessary parties is crucial to effectively managing cases, as well as the time required to make connections between different pieces of evidence. Guardian and Pathfinder have not only led to the offloading of other costs but deliver value through the capabilities that the agency previously lacked.

While Pathfinder is not yet used for all active cases, the choice to roll the tool out slowly has not only helped to mitigate any issues but has also helped Nampa PD to gain a better understanding of the benefit the product delivers. For example, by comparing cases where Pathfinder is used versus those where it is not, the agency can more easily identify time savings attributed to the use of Pathfinder.

## NET CASH FLOWS



## CALCULATING THE ROI

Nucleus Research analyzed the costs of software, hardware, personnel, and user training over a three-year period to quantify the Nampa police department's total investment in Cellebrite technology.

Direct benefits quantified include retired software and hardware costs. Indirect benefits quantified include the time savings afforded by data sharing and consolidation features offered through Guardian and Pathfinder, respectively. The indirect benefit is multiplied by a correction factor to account for the inefficient transfer of time between time saved and additional time spent working.

# FINANCIAL ANALYSIS

## Cellebrite

**Annual ROI: 116%**

**Payback period: 1.2 years**

BENEFITS	Pre-start	Year 1	Year 2	Year 3
Direct	0	13,900	13,900	13,900
Indirect	0	85,500	85,500	85,500
<b>Total per period</b>	<b>0</b>	<b>99,400</b>	<b>99,400</b>	<b>99,400</b>

COSTS - CAPITALIZED ASSETS	Pre-start	Year 1	Year 2	Year 3
Software	0	0	0	0
Hardware	0	0	0	0
Project consulting and personnel	0	0	0	0
<b>Total per period</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

COSTS - DEPRECIATION	Pre-start	Year 1	Year 2	Year 3
Software	0	0	0	0
Hardware	0	0	0	0
Project consulting and personnel	0	0	0	0
<b>Total per period</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

COSTS - EXPENSED	Pre-start	Year 1	Year 2	Year 3
Software	50,000	50,000	50,000	0
Hardware	0	0	0	0
Consulting	0	0	0	0
Personnel	0	0	0	0
Training	7,200	0	0	0
Other	0	0	0	0
<b>Total per period</b>	<b>57,200</b>	<b>50,000</b>	<b>50,000</b>	<b>0</b>

FINANCIAL ANALYSIS	Results	Year 1	Year 2	Year 3
All government taxes	45%			
Cost of capital	7.0%			
Net cash flow before taxes	(57,200)	49,400	49,400	99,400
Net cash flow after taxes	(31,460)	27,170	27,170	54,670
<b>Annual ROI - direct and indirect benefits</b>				<b>116%</b>
Annual ROI - direct benefits only				-34%
Net Present Value (NPV)				62,291
<b>Payback period</b>				<b>1.2 years</b>
Average Annual Cost of Ownership				52,400
3-Year IRR				84%

All calculations are based on Nucleus Research's independent analysis of the expected costs and benefits associated with the solution.