

# Sebastian Enterprises Earns ROI on Fleet Management

A GE Security Case Study



## Executive Summary

In October 2007, Sebastian implemented GE Security's NavLogix™ system on 20 of its vehicles. The company measured cost savings and productivity increases resulting from NavLogix for the next 90 days. At the end of the three-month period, Sebastian reviewed the data and calculated its annual return on investment for the 20 vehicles in the study:

	Annual
Vehicle Operating Cost Savings per Vehicle	<b>\$1,778</b>
Employee Productivity Increases per Vehicle	<b>+ \$780</b>
Employee Overtime Savings per Vehicle	<b>+ \$96</b>
Total Annual Benefits of NavLogix	<b>= \$2,654</b>
Total Annual Costs of NavLogix (Monthly fee x 12)	<b>- &gt;\$600 (retail price)<sup>1</sup></b>
Total Annual Profit from NavLogix	<b>\$2,054</b>
Annual Return on Investment	<b>442% +</b>

Sebastian improved its annual profits by \$2,054 per vehicle with NavLogix.

Based on these results, Sebastian decided to incorporate NavLogix into the remainder of its 75-vehicle fleet.



“ GE Security's NavLogix system has become an essential tool for Sebastian. We've enjoyed an ROI of more than 400 percent, literally increasing our annual profits by thousands of dollars per vehicle. And, this analysis understates the total impact NavLogix has on our business; our decision to install NavLogix has also led to higher customer satisfaction and reduced risk. I believe any security dealer that operates a fleet will profit from NavLogix. ”

-Ron Cato, VP Operations



**SEBASTIAN**

## About Sebastian Enterprises

Sebastian delivers leading-edge security and communications systems to residential and business customers in central California. The company has 160 employees and \$28,000,000 in annual sales. Sebastian includes a fleet of 75 vehicles. Its teams of estimators and technicians are responsible for installing, repairing, and maintaining security, telephone, data and networking systems, as well as electrical contracting. Sebastian uses its vehicles to install or maintain security systems in 40 percent of the vehicles' use, and for communications and electrical contracting projects for 60 percent of the vehicles' use.

<sup>1</sup>NavLogix pricing varies according to the number of vehicles in a fleet. Sebastian actually paid less than \$50/month. NavLogix has no up-front costs for hardware. Contact GE Security for more information at 1-877-GES-MKTG.

## About GE's NavLogix™ System

GE's NavLogix™ mobile resource management system allows fleet managers to track their fleet vehicles quickly and conveniently. GPS technology determines each vehicle's location, while wireless communication relays information back to a central server. Customers view vehicle locations and routes using their web browser, and they can receive real-time e-mail alerts about off-track or speeding vehicles. Detailed vehicle history and reports are archived and available for more than one year.

NavLogix features a compact dual mode cellular and GPS antenna. Units can be installed in every vehicle in the fleet. Each unit connects to the vehicle's power supply, so it goes into active mode whenever the vehicle's ignition is turned on. On the road, GPS satellites communicate in real time with the onboard unit to determine the vehicle's location, speed and direction. NavLogix uses cellular communications to transmit the vehicle information to a hosted web server.

## October–December, 2007: Testing NavLogix

Based on its management team's experience at other companies, Sebastian believed that it could significantly improve its profitability by utilizing GE Security's NavLogix system. The team believed that NavLogix' GPS tracking and data-rich reports would enable them to decrease operating expenses for its fleet, increase employee productivity and decrease overtime costs.

In order to determine if these improvements outweighed the cost of the NavLogix system, Sebastian tested NavLogix on 20 fleet vehicles from October through December, 2007. Mileage, employee overtime and employee productivity were tracked and compared to the previous three months, July through September. The evaluation team reviewed the vehicles' use patterns and verified that vehicle utilization rates, distances to job sites and seasonality did not skew the results.

## January 2008: Analyzing the Results

### Vehicle Operating Cost Savings: Fuel, Maintenance and Depreciation

When NavLogix was used as a fleet management tool, variable costs associated with operating Sebastian Enterprises' fleet fell significantly. From July through September, the 20 vehicles averaged 1,657 miles per month. During the test period October through December, mileage fell 26%, or 435 miles per vehicle. This decrease was independent of seasonality, for the volume of service calls and installations had not changed significantly. *Exhibit 1 details results of Sebastian's study.*

Sebastian arrived at an obvious conclusion: NavLogix had changed employee behavior. Estimators and technicians understood that the company could analyze where and when company vehicles were used. Inappropriate use of the vehicles decreased immediately. Company vehicles were no longer used after hours, on weekends or for side trips during the weekday. Dispatch efficiency also increased, because Sebastian could easily locate the technician who was closest to a customer.

The operations team used several NavLogix features to monitor the use of its fleet vehicles. These included weekend and after-hours alerts, geo-fencing, and 24-hour activity reports. The Sebastian operations team received e-mail alerts whenever vehicles were operated before or after reasonable business hours, on weekends or driven outside the territory that Sebastian typically services (geo-fencing). If an alert was received, the team simply looked at the vehicle's history to determine if the exception was appropriate for the business. *Exhibits 2, 3 and 4 provide examples of weekend and after-hours alerts, geo-fencing and an activity report.*

In January 2008, the team estimated that Sebastian spent \$0.34 per mile in variable costs to operate a fleet vehicle. These costs included fuel expense, as well as tires, other maintenance expenses and depreciation estimates obtained from AAA:

		Source
Fuel cost per gallon	\$3.33	California Energy Commission <sup>2</sup>
Average MPG per vehicle	/ 14	Company records
Fuel cost per mile	\$0.24	
Tires & maint. operating costs per mile	+ \$0.06	AAA <sup>3</sup>
Vehicle depreciation per mile	+ \$0.04	AAA <sup>4</sup>
Total Variable Operating Costs per mile	= \$0.34	
Average decrease in miles per vehicle per month	x 435	Exhibit 1
<b>Vehicle Operating Costs Saving per Vehicle per Month</b>	<b>\$148.33</b>	

Assuming the variable operating cost of \$0.34 per mile and a decrease of 435 miles per vehicle per month, the team saved \$148 per vehicle per month, or \$1778 per vehicle annually.

## Employee Productivity Increases

As employees decreased side trips and vehicle dispatch became more efficient, the number of service calls handled by Sebastian Enterprises' technicians increased. By the end of December, Sebastian estimated that the number of calls that it serviced had increased by 10 percent. Each vehicle averaged \$50 in profit per call.

Increase in employee productivity	10%
Service calls per vehicle per month	x 13
Average profit per service call	x \$50
<b>Employee Productivity Increase per Vehicle per Month</b>	<b>\$65</b>

The team at Sebastian estimated NavLogix™ increased employee productivity by \$65 per vehicle per month, or \$780 per vehicle annually.

## Employee Overtime Savings

In addition to savings associated with their fleet vehicles, Sebastian noticed that employee overtime for the operators of the monitored vehicles had decreased by 10 percent. Field technicians understood that NavLogix could be used to verify their overtime at a job site. As a result, overtime reporting became more accurate after the team implemented NavLogix. *Exhibit 5 provides a 24-hour vehicle history report.*

Prior to implementing NavLogix, employees averaged two hours of overtime per month. Using this information, the team calculated the benefits associated with overtime as:

Overtime hours per employee per month	2
% Reduction of unnecessary overtime	x 10%
Average overtime wage (\$/hour)	x \$40
<b>Employee Overtime Savings per Vehicle per Month</b>	<b>\$8</b>

Employee overtime savings equated to \$8 per vehicle per month or \$96 per vehicle annually.

<sup>2</sup>On 1/7/08, California Statewide Average Retail, Regular Gasoline price was \$3.328; California Energy Commission, <http://www.energy.ca.gov/gasoline/>.

<sup>3</sup>AAA estimates 6.4 cents per mile for an SUV and 5.4 cents per mile for a minivan, "Your Driving Costs," AAA, <http://www.aaaexchange.com/Assets/Files/20084141552360.DrivingCosts2008.pdf>.

<sup>4</sup>AAA estimates depreciation increases 3.9 cents per mile for SUVs and minivans with annual mileage between 15,000 and 20,000 miles per year (\$130 additional depreciation due to 5,000 additional annual miles), "Your Driving Costs," AAA, <http://www.aaaexchange.com/Assets/Files/20084141552360.DrivingCosts2008.pdf>.

## June 2008: 5 Months Later

Today, every vehicle in Sebastian Enterprises' fleet is equipped with NavLogix™. Ron Cato, VP of Operations for Sebastian, states,

“ I have every reason to believe that, by implementing NavLogix on our 75 vehicles, my team has increased Sebastian 2008 profits by \$150,000. ”

*-Ron Cato, VP Operations*

In addition to the benefits that Sebastian quantified in its ROI analysis, it uses NavLogix to realize other important 'soft' benefits. Specifically, Sebastian uses NavLogix to reduce its risk, improve teamwork and improve customer satisfaction:

- Speeding alerts notify management when vehicles are driven recklessly. As a result, consumer complaints have fallen.
- At headquarters, the company has implemented a large display that shows the real-time location of every company vehicle. Workers at headquarters understand how hard the technicians in the field are working, and this understanding has improved morale and teamwork.
- Technicians don't leave a job site early, leading to improved customer satisfaction.



*Employee speeding fine box*



*NavLogix tracking screen in corporate office*

## Conclusion

Sebastian increased its profits by \$150,000 per year using NavLogix. And, Sebastian's ROI on implementing GE's NavLogix System exceeded 400%.

How much can you increase your company's profits?

Sebastian experienced the biggest impact on profitability due to decreased fleet expenses. However, if your company experiences more jobs per month that are shorter in duration (such as a higher percentage of residential security jobs) employee productivity and decreased overtime may be more important factors for you.

Want to find out how much your company can save using NavLogix? Complete the calculator at [gesecurity.com/GSPProfit](http://gesecurity.com/GSPProfit) then contact GE's NavLogix team at 1-877-437-6584.



## Exhibit 1

### Decreases in miles driven per month due to NavLogix

Average Miles per Month				
	Jul–Sept (Before NavLogix)	Oct–Dec	Decrease	% Decrease
Vehicle 1	2,050	2,237	-187	-9%
Vehicle 2	2,272	543	1,729	76%
Vehicle 3	1,341	1,183	158	12%
Vehicle 4	1,213	729	485	40%
Vehicle 5	795	646	150	19%
Vehicle 6	1,247	1,491	-244	-20%
Vehicle 7	1,805	781	1,023	57%
Vehicle 8	1,341	828	513	38%
Vehicle 9	1,437	523	914	64%
Vehicle 10	773	482	291	38%
Vehicle 11	1,629	1,776	-147	-9%
Vehicle 12	1,928	1,915	13	1%
Vehicle 13	762	782	-20	-3%
Vehicle 14	1,206	488	718	60%
Vehicle 15	1,676	1,281	395	24%
Vehicle 16	1,896	909	987	52%
Vehicle 17	1,635	1,624	11	1%
Vehicle 18	3,106	2,855	251	8%
Vehicle 19	2,945	1,736	1,208	41%
Vehicle 20	2,095	1,649	446	21%
<b>Total</b>	<b>33,150</b>	<b>24,457</b>	<b>8,694</b>	<b>26%</b>
Per vehicle	1,657	1,223	435	

## Exhibit 2

### Example of Sebastian’s weekend and after-hours alert settings

Vehicles	Drivers	Locations	Alerts	Tracking
Order By <input type="text" value="Description"/> <input checked="" type="radio"/> Ascending <input type="radio"/> Descending				
Description	Type	Notify By	Alert Details	
<a href="#">100 Mile Radius of KerTel</a>	Geo Fence (Boundary)	E-mail	(Entry and Exit) 100.00 Miles Around 7447 N. Palm Bluffs Ave., #101	
<a href="#">Early Morning Driving</a>	Hours of Operation	E-mail	Between 00:00 and 05:00	
<a href="#">Geo Fence Reset</a>	Geo Fence (Boundary)	E-mail	(Entry and Exit) 2.00 Miles Around 811 S Madera Ave	
<a href="#">Night Driving</a>	Hours of Operation	E-mail	Between 19:00 and 23:59	
<a href="#">Oil Change Due</a>	Vehicle Maintenance	E-mail	Every 3000 miles	
<a href="#">Speeding over 75MPH</a>	Maximum Speed	E-mail	75mph for 60 Seconds	
<a href="#">Weekend Driving</a>	Hours of Operation	E-mail	Between 00:01 and 23:59	
<a href="#">Add a New Alert</a>				

### Exhibit 3

#### Example of Sebastian's geo-fence settings



### Exhibit 4

#### Sample 24-hour vehicle activity report

Vehicles	Drivers	Locations	Alerts			
Vehicles On This Report: 1						
Date	Event Description	Speed	Distance [M]	Duration	Address	City, State, Zip Code
10/15/2007 21:16:40	Start	0	0.00		160 W Shaw Ave	Clovis, Ca 93612
10/15/2007 21:23:35	Position Report	0	1.82	0:07	665 Barstow Ave	Clovis, Ca 93612
10/15/2007 21:28:35	Position Report	0	0.01	0:05	1154 Clovis Ave	Clovis, Ca 93612
10/15/2007 21:33:35	Position Report	50	1.35	0:05	11 Clovis Ave	Fresno, Ca 93727
10/15/2007 21:36:05	Stop	0	0.59	9:23	5664 E. Bernadine Dr.	Fresno, CA 93727

## Exhibit 5

### 24-hour History Report

Date	Event Description	Speed	Distance [M]	Duration	Address	City,State,Zip Code
10/15/2007 21:36:05	Stop	0	0.59	9:23	5664 E. Bernadine Dr.	Fresno, CA 93727
10/15/2007 21:33:35	Position Report	50	1.35	0:05	N Clovis Ave	Fresno, Ca 93727
10/15/2007 21:28:35	Position Report	0	0.01	0:05	1154 Clovis Ave	Clovis, Ca 93612
10/15/2007 21:23:35	Position Report	0	1.82	0:07	665 Barstow Ave	Clovis, Ca 93612
10/15/2007 21:16:40	Start	0	0.00		160 W Shaw Ave	Clovis, Ca 93612
10/15/2007 16:26:39	Stop	0	0.92	4:50	160 W Shaw Ave	Clovis, Ca 93612
10/15/2007 16:24:03	Position Report	34	2.50	0:05	674 Villa Ave	Clovis, Ca 93612
10/15/2007 16:19:03	Position Report	34	1.60	0:05	340 W Nees Ave	Clovis, Ca 93611
10/15/2007 16:14:03	Position Report	34	1.61	0:05	2014 E Nees Ave	Fresno, Ca 93720
10/15/2007 16:09:03	Position Report	34	2.28	0:06	513 E Nees Ave	Fresno, Ca 93720
10/15/2007 16:03:19	Start	0	0.00		7447 N. Palm Bluffs Ave., #101	Fresno, CA 93711
10/15/2007 07:46:26	Stop	0	0.54	8:17	7447 N. Palm Bluffs Ave., #101	Fresno, CA 93711
10/15/2007 07:44:17	Position Report	39	2.48	0:05	7656 N Palm Ave	Fresno, Ca 93711
10/15/2007 07:39:18	Speed Alert	65	2.34	0:02	Yosemite Fwy	Fresno, Ca 93720
10/15/2007 07:37:00	Speed Alert	65	0.39	0:01	Yosemite Fwy	Fresno, Ca 93710
10/15/2007 07:36:38	Position Report	61	1.84	0:05	Yosemite Fwy	Fresno, Ca 93726