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MEETING GOVERNMENT MANDATES TO REDUCE FLEET SIZE

HOW WIRELESS FLEET MANAGEMENT CAN HELP EXCEED FLEET OPTIMIZATION GOALS

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OVERVIEW

With shrinking budgets, state and local governments are mandating fleet vehicle reductions as a way to cut costs. Fleet managers are being asked tough questions about how, why and by whom their vehicles are being used.

In many states, governors and state agencies are calling for fleet reductions of at least 10 percent. Here are examples taken from recent news reports:

- In 2009, Connecticut’s Governor M. Jodi Rell issued an Executive Order cutting the state’s fleet of cars and trucks by 20 percent, imposing much stricter rules on when and why state employees can use a state-owned vehicle.
- The Governor of New Jersey similarly announced reductions in the number of state cars on the road. With the latest round of reductions, New Jersey’s fleet of passenger vehicles has fallen to under 9,700 – the lowest point since January 2004.
- An audit citing more than 5,000 accidents in state vehicles contributed to West Virginia’s Governor proposing legislation to consolidate and centralize the state’s vehicle fleet, according to The Charleston Gazette.
- In May 2009, Governor Jack Markell of Delaware mandated a 20 percent reduction in Delaware’s fleet and put state vehicles up for auction.
- In the County of Maui, Hawaii, a commission suggested that the county could save millions by purging old vehicles, improving maintenance and management, and reducing the overall size of its fleet.
- Gov. Schwarzenegger of California ordered a 15 percent cut in the state’s vehicle fleet, following a critical audit revealing that possibly thousands of workers are given government cars to take home at night without justification.

The Governor of New Jersey summed it up in a news release: “So many people have written me about this issue, expressing frustration about the number of state cars and trucks on the road and the way they are driven. Too many agencies don’t even know how many cars they own or where they are.”

For most jurisdictions, an overall fleet-size reduction of at least 5 -10 percent is achievable. Government fleet managers are finding that accomplishing this reduction is possible by using a wireless fleet management system such as Networkfleet to monitor fleet vehicle usage.

Reducing fleet size yields big gains in cost savings. For example, for a fleet of 1,000 units, eliminating 100 units can save more than \$300,000 per year in operating costs (Government Fleet Magazine, Nov. 2009). With wireless fleet management technology, costs can further be reduced by lowering fuel consumption and reducing maintenance on the vehicles that remain in the fleet.



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USING WIRELESS FLEET MANAGEMENT TO REDUCE FLEET SIZE

I. Monitoring Vehicle Utilization

By continuously monitoring a vehicle's location and engine status, a wireless fleet management system can provide detailed information on each vehicle's usage, including miles traveled, engine hours, days utilized, number of trips, and more, for specific periods of time. This allows fleet managers to analyze both under and over utilization of vehicles to maximize fleet productivity.

Using utilization data, fleet managers can determine which vehicles are being used daily, weekly or monthly, and what percentage of the time. If lesser-used vehicles are not mission-critical, they can potentially be eliminated by having other vehicles pick up the workload. In addition, over-utilized vehicles can be rotated with under-utilized vehicles to balance out usage and wear and tear.

Networkfleet's fleet management system provides access to fleet utilization statistics such as:

- Timely and accurate vehicle usage data, with trends over time
- Miles driven and/or engine hours for each vehicle and vehicle type
- Number of trips taken for each vehicle and vehicle type
- Utilization for each site, location or department
- Days utilized for each vehicle and vehicle type
- Average and peak utilization

Networkfleet utilization reports include the Utilization Summary Report and the Utilization by Day Report. Users can set multiple parameters for each report. This flexibility allows them to run a comprehensive report for all vehicles on a single parameter such as "miles driven," or an exception report such as "miles driven greater than 100" or "days utilized less than 5."

"San Bernardino County Fleet Management has always monitored vehicle utilization in order to optimize fleet size and mix, but current economic conditions and the resulting budget pressures have made this even more critical," stated Ron Lindsey, Fleet Services Manager, County of San Bernardino, California. "Networkfleet's Utilization Summary Report and the Utilization by Day Report are additional tools we will use to improve utilization, efficiency and reduce operational costs for the County of San Bernardino's vehicle fleet."

**Example:
Utilization
Summary
Report**

Vehicle Label	VIN	Year Make Model	Miles Traveled	Vehicle Engine Hours	Days Utilized	Trips	Last Key Off Time
8396 2010 TOYOTA CAMRY HYBRID	4T1B83EK14U126212	2010 TOYOTA CAMRY HYBRID	8.7	22m 7s	0	12	09/30/2010 11:21 AM
8408 2002 FORD TAURUS	1FAP959624A98324	2002 FORD TAURUS	6.0	2m 15s	1	1	09/30/2010 02:31 PM
8487 2005 HONDA CIVIC HYBRID	JH6ES96655010304	2005 HONDA CIVIC HYBRID	90.8	3h 35m 49s	4	10	09/27/2010 02:30 AM
8474 2004 CHEVROLET MALIBU	1G1Z5C2F4F239452	2004 CHEVROLET MALIBU	420.1	4h 32m 7s	3	10	09/28/2010 12:17 PM
8476 2004 CHEVROLET SPALIA	2011V93E24094061	2004 CHEVROLET SPALIA	60.7	2h 0m 42s	2	6	09/22/2010 01:29 PM
8480 2005 FORD TAURUS	1FAPP93175A271956	2005 FORD TAURUS	316.5	10h 40m 12s	6	29	09/30/2010 02:13 PM
8501 2006 HONDA CIVIC HYBRID	JH6FA26305060032	2006 HONDA CIVIC HYBRID	237.6	12h 51m 7s	5	23	10/01/2010 02:38 AM
8519 2008 FORD TAURUS	1FAPP95640A227162	2008 FORD TAURUS	27.2	3h 4m 31s	10	87	10/01/2010 08:47 AM
8520 2008 FORD TAURUS	1FAPP95626A229982	2008 FORD TAURUS	262.2	8h 54m 55s	8	26	09/30/2010 02:28 PM
8523 2006 CHEVROLET MALIBU	2011V759426842976	2006 CHEVROLET MALIBU	91.2	4h 58m 49s	7	50	09/30/2010 02:23 PM
8526 2006 CHEVROLET SPALIA	2011V759698435220	2006 CHEVROLET SPALIA	229.7	8h 33m 35s	6	46	09/30/2010 02:55 PM
8530 2007 TOYOTA CAMRY HYBRID	4T1B84K870058332	2007 TOYOTA CAMRY HYBRID	72.5	3h 10m 24s	5	15	09/30/2010 05:28 PM
8533 2008 FORD CROWN VICTORIA	2FAPP1V480102379	2008 FORD CROWN VICTORIA	433.1	17h 14m 0s	5	71	09/25/2010 07:39 PM
8534 2008 FORD CROWN VICTORIA	2FAPP1V480102388	2008 FORD CROWN VICTORIA	398.3	23h 24m 37s	8	116	09/30/2010 07:16 AM
8544 2007 CHEVROLET SPALIA	2011V759670704688	2007 CHEVROLET SPALIA	219.2	8h 15m 23s	6	42	09/29/2010 10:12 AM
8545 2007 CHEVROLET SPALIA	2011V759670705032	2007 CHEVROLET SPALIA	388.0	15h 54m 18s	6	75	10/01/2010 09:24 AM
8556 2007 DODGE CHARGER	283KA43067N782073	2007 DODGE CHARGER	227.2	6h 14m 57s	9	51	10/01/2010 08:51 AM
8557 2008 CHEVROLET SPALIA	2011V7596388145746	2008 CHEVROLET SPALIA	426.7	12h 44m 24s	5	35	09/30/2010 04:24 PM
8561 2008 CHEVROLET SPALIA	2011V7591389132789	2008 CHEVROLET SPALIA	226.0	7h 48m 42s	9	28	10/01/2010 09:27 AM
8572 2006 CHEVROLET MALIBU HYBRID	1G1ZP57109F226739	2006 CHEVROLET MALIBU HYBRID	9.7	45m 15s	0	6	09/30/2010 10:18 AM

**Example:
Utilization by
Day Report**

Report: Fleet Utilization - Utilization by Day Report

Search Vehicle(s): All Vehicles
 Report Run Date/Time: 10/13/2010 08:18 AM PST
 Report Time Period: 09/06/2010 07:00 AM - 09/13/2010 07:00 AM
 Fleet Utilization Parameter: Trips
 Number of Vehicles Included in Report: 82
 Include Vehicles with No Utilization: No

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Vehicle Label	VIN	Year Make Model	Mon 09/06/2010	Tue 09/07/2010	Wed 09/08/2010	Thu 09/09/2010	Fri 09/10/2010	Sat 09/11/2010	Sun 09/13/2010	Total
8446 2002 FORD TAURUS	1FAPR0220201977	2002 FORD TAURUS		2		2				4
8474 2004 CHEVROLET MALIBU	1G1ZS52F4F239482	2004 CHEVROLET MALIBU			4					4
8476 2004 CHEVROLET MALIBU	201W152E24284081	2004 CHEVROLET MALIBU					3			3
8486 2005 FORD TAURUS	1FAPR931754227886	2005 FORD TAURUS			8	5	7	3		24
8501 2008 HONDA CIVIC HYBRID	HMFA3K2630509532	2008 HONDA CIVIC HYBRID						1		1
8520 2009 FORD TAURUS	1FAPR96J26A23992	2009 FORD TAURUS			8		3	2		13
8523 2008 CHEVROLET MALIBU	201W1759A3943978	2008 CHEVROLET MALIBU		2			9			11
8526 2006 CHEVROLET MALIBU	201W1759A889432233	2006 CHEVROLET MALIBU			2					2
8530 2007 TOYOTA CARRIY HYBRID	4T1B848K7U500532	2007 TOYOTA CARRIY HYBRID		3			5	4		12
8533 2008 FORD CROWN VICTORIA	2FAPR11V46X10279	2008 FORD CROWN VICTORIA				11		22	13	46
8534 2008 FORD CROWN VICTORIA	2FAPR11V58X10280	2008 FORD CROWN VICTORIA	38	11				30	29	109
8544 2007 CHEVROLET MALIBU	201W1759A87934886	2007 CHEVROLET MALIBU		10	2	9	2			23
8546 2007 CHEVROLET MALIBU	201W1759A7938832	2007 CHEVROLET MALIBU		8		4				12
8567 2008 CHEVROLET MALIBU	201W1759A30914714	2008 CHEVROLET MALIBU		7	10	10	12			39
8561 2008 CHEVROLET MALIBU	201W1759A309132739	2008 CHEVROLET MALIBU			5					5
8572 2009 CHEVROLET MALIBU HYBRID	1G1ZP5709P228739	2009 CHEVROLET MALIBU HYBRID			5		4	2		11
8573 2009 CHEVROLET MALIBU HYBRID	1G1ZP5709P228233	2009 CHEVROLET MALIBU		1		1	1			3
8586 2009 FORD EXPLORER 4WD	1FMEL7K36GA41475	2009 FORD EXPLORER		7		14	14			35
8587 2010 TOYOTA CARRIY HYBRID	4T1B848K5A112326	2010 TOYOTA CARRIY HYBRID			14		4	5		23
8588 2010 TOYOTA PRUS	1TDBZ30G4A128719	2010 TOYOTA PRUS HYBRID			4		4	14		22
Totals			101	142	69	64	34	20	716	2440

82 more found, displaying 20 rows, from 1 to 20. Show 20 per page



Using Networkfleet’s online reports, Danny Schepis, Vehicle Manager for the VA Hospital in Wichita, KS, has seen an improvement in vehicle utilization, which jumped from 70% to 93% after Networkfleet was installed. “We have to show that every government-leased vehicle is regularly used and not sitting in a parking lot,” said Schepis.

II. Reducing Vehicles Miles Traveled

A. Eliminating unauthorized usage, both during and after business hours

Many government agencies allow workers to take vehicles home at night, but have policies against using government vehicles for personal driving. By monitoring usage and commute patterns, government fleet managers can determine if vehicles are being used for personal reasons or if they can be shared by multiple workers.

Networkfleet’s wireless fleet management system offers reports and alerts that can help fleet managers measure unauthorized usage:

- **Odd Hours Report** identifies vehicles that are being used during unauthorized hours – weekends, after work hours, etc. The report allows fleet managers to enter a “Violation Window” and the date range and the report will identify any vehicles that were in violation, along with the first and last time they operated in that window, their speed and locations.
- **Odd Hours Activity Alerts** identifies vehicles that are being used during unauthorized hours – weekends, after work hours, etc. immediately as that usage occurs. While the Odd Hours Report is an after the fact summary report, the Odd Hours Activity Alerts are designed to immediately alert relevant personnel when odd hour usage occurs.

Fleet managers can also use a wireless fleet management system to help them identify wasteful commuting patterns. By reviewing vehicle activity reports, unnecessary commuting can be virtually eliminated.

**Example:
Odd Hours
Report**

Vehicle	Start Time	End Time	Start Location	End Location
B130 2007 TOYOTA CAMRY HYBRID	09/09/2010 08:59 PM	09/09/2010 08:59 PM	2921 Chert Creek Rd, Redwood, CA 95462 US	1807 Hilltop Dr, Redwood, CA 95474 US
B133 2008 FORD CROWN VICTORIA	09/10/2010 07:50 PM	09/10/2010 07:50 PM	2622 Bryant St, Santa Rosa, CA 95405 US	Santa Rosa, CA 95405 US
B133 2008 FORD CROWN VICTORIA	09/11/2010 07:17 PM	09/11/2010 07:53 PM	2742 Vineburg Ave, Santa Rosa, CA 95403 US	Santa Rosa, CA 95405 US
B134 2008 FORD CROWN VICTORIA	09/09/2010 09:00 PM	09/09/2010 07:46 PM	1786 Summerfield St, Santa Rosa, CA 95405 US	Santa Rosa, CA 95405 US
B134 2008 FORD CROWN VICTORIA	09/07/2010 06:01 PM	09/07/2010 08:13 PM	5128 Pacheco Dr, Santa Rosa, CA 95409 US	Santa Rosa, CA 95405 US
B134 2008 FORD CROWN VICTORIA	09/11/2010 08:01 PM	09/11/2010 07:52 PM	3265 Oak Redwood Hwy, Larkspur, CA 94903 US	Santa Rosa, CA 95405 US
B134 2008 FORD CROWN VICTORIA	09/13/2010 08:51 PM	09/13/2010 07:50 PM	Santa Rosa, CA 95405 US	Santa Rosa, CA 95405 US
B167 2008 CHEVROLET IMPALA	09/09/2010 08:35 PM	09/09/2010 09:02 PM	2902 Hilltop Ln, Santa Rosa, CA 95402 US	Santa Rosa, CA 95405 US
C130 2008 DODGE STRATUS	09/11/2010 08:00 PM	09/11/2010 07:50 PM	1402 North Blvd, San Francisco, CA 94108 US	Santa Rosa, CA 95405 US
C132 2008 HONDA CIVIC HYBRID	09/07/2010 06:00 PM	09/07/2010 06:18 PM	8785 Bennett Valley Rd, CA 95404 US	451 Francis Dr, Santa Rosa, CA 95403 US
C417 2008 CHEVROLET IMPALA	09/09/2010 08:35 PM	09/09/2010 08:58 PM	2902 Hilltop Ln, Santa Rosa, CA 95402 US	Santa Rosa, CA 95405 US
C419 2008 FORD CROWN VICTORIA	09/06/2010 08:00 PM	09/06/2010 07:47 PM	10080 Eyer St, CA 95430 US	Santa Rosa, CA 95405 US
C419 2008 FORD CROWN VICTORIA	09/07/2010 06:01 PM	09/07/2010 06:16 PM	7 Base Dr, Santa Rosa, CA 95408 US	Santa Rosa, CA 95405 US
C419 2008 FORD CROWN VICTORIA	09/09/2010 05:51 PM	09/09/2010 08:59 PM	246 Dutton Ave, Santa Rosa, CA 95407 US	Santa Rosa, CA 95405 US
C419 2008 FORD CROWN VICTORIA	09/12/2010 08:59 PM	09/12/2010 07:50 PM	Santa Rosa, CA 95405 US	Santa Rosa, CA 95405 US
C424 2008 CHEVROLET MALIBU	09/09/2010 08:00 PM	09/09/2010 06:59 PM	355 North Ave, Santa Rosa, CA 95404 US	Quincy Ln, CA 95405 US
C424 2008 CHEVROLET MALIBU	09/07/2010 07:48 PM	09/07/2010 08:24 PM	Quincy Ln, CA 95405 US	38 Second Dr, Redwood, CA 94907 US
C424 2008 CHEVROLET MALIBU	09/09/2010 08:48 PM	09/09/2010 12:44 AM	2902 Hilltop St, Santa Rosa, CA 95407 US	Quincy Ln, CA 95405 US
C424 2008 CHEVROLET MALIBU	09/09/2010 08:01 PM	09/09/2010 08:19 PM	Quincy Ln, CA 95405 US	581 Buckeye Dr, Windsor, CA 95402 US
C424 2008 CHEVROLET MALIBU	09/10/2010 07:18 PM	09/10/2010 09:01 PM	Quincy Ln, CA 95405 US	581 Buckeye Dr, Windsor, CA 95402 US

Fleet managers can view not only current location, but also stops, idling and mileage to provide information that can yield benefits in efficiency and cost reductions.

B. Improved routing through real time and post route analysis and geofences

Route Analysis

A wireless fleet management system continually monitors every vehicle’s location. Fleet managers can view not only current location, but also stops, idling and mileage to provide information that can yield benefits in efficiency and cost reductions.

Networkfleet provides several options to help reduce miles traveled through more efficient routing. These include:

- View a real-time, comprehensive map of all current vehicle locations and their status. Use the “closest vehicle” function to specify an address and locate the closest vehicle.
- Ability to route a specific vehicle to the next job and provide driving directions. Choose the vehicle you want to send to the job and a screen will appear detailing directions from the vehicle’s current location to the job site.
- Review up to 90 days of vehicle location history online.
- Track weekly mileage to assure that total miles traveled are dropping: Choose reports such as the Drive Time Summary Report and note weekly mileage trends over time.

“Just checking idle time and how many start and stops we were having in a day helped in our utilization study, especially since we were trying to consolidate vehicles,” said Bill Griffiths, fleet manager at the Smithsonian Institute. “For example, we found that we had four or five vehicles assigned to one area, and they were all going to the same location. They were also idling the majority of the time. We determined that we could get some shared use out of these vehicles, which eventually allowed us to actually eliminate 12 full size vehicles.”

Geofences

Government fleet managers can use wireless fleet management to place geofences in certain geographical areas to pinpoint vehicles that venture in and out of those areas. This can help track unauthorized vehicle usage and optimize routing.

- With Networkfleet’s Geofence Violation Report, fleet managers can easily monitor vehicle movement into and/or out of a user-defined geographic area (Geofence). This report provides a history that details when a vehicle entered or exited a Geofence and the duration of time spent within the specified area.

By analyzing maintenance issues, such as the number of Diagnostic Trouble Codes (DTC) by make/model, fleet managers can determine which vehicles would be most advantageous to sell or replace.

Replacing Older Vehicles

Government fleets sometimes keep older vehicles as backups, growing the size of the fleet. Using a wireless fleet management system, an analysis of average annual utilization by model-year typically reveals that older vehicles are not being used as frequently as newer units. In addition, by analyzing maintenance issues, such as the number of Diagnostic Trouble Codes (DTC) by make/model, fleet managers can determine which vehicles would be most advantageous to sell or replace. This will help in controlling fleet size and performance.

According to Mark Iverson, Maintenance Director for the Eastern Municipal Water District in Perris, CA, one of the agency's goals was to make more efficient use of its 350-vehicle fleet. "When the district extended the criteria for 'vehicle life' from 10 years/200,000 miles to 12 years/250,000 miles, we began a study using Networkfleet that covered all aspects of fleet management and efficiency. This assessment resulted in changes that have already yielded huge cost savings and will undoubtedly prolong the life of our fleet."

Conclusion

With government budgets expected to be tight for years to come, astute fleet managers will need to continue to carefully manage fleet size and vehicle usage. Even without government mandates, it is always a smart practice to use taxpayers' funds wisely. Fortunately, wireless fleet managements systems such as Networkfleet make it easier to improve fleet utilization and optimize fleet size.

**For more information, contact
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