



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.



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.

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

Report: Fleet Utilization - Utilization Summary Report

Selected Vehicle(s): All Vehicles

Report Run Date/Time: 10/01/2010 09:40 AM PDT

Report Time Period: 09/20/2010 12:00 AM - 10/04/2010 12:00 AM

Fleet Utilization Filter: Miles Driven Less Than or Equal 1000

Number of Vehicles Included in Report: 99

Include Vehicles with No Utilization: No

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Vehicle Label	A	VIN	Year Make Model	Miles Traveled	Vehicle Engine Hours	Days Utilized	Trips	Last Key Off Time	
B386	2010 TOYOTA CAMRY HYBRID	4T1B8XK14U126312	2010 TOYOTA CAMRY HYBRID	0.7	22m 7s	3	12	09/30/2010 11:21 AM	
B408	2002 FORD TAURUS	1FAPPS5U4A160324	2002 FORD TAURUS	0.0	2m 10s	1	1	09/30/2010 02:31 PM	
B487	2005 HONDA CIVIC HYBRID	JH0E596850010084	2005 HONDA CIVIC HYBRID	90.8	3h 36m 49s	4	10	09/27/2010 02:30 PM	
B474	2004 CHEVROLET MALIBU	1G1Z5S2F44F29482	2004 CHEVROLET MALIBU	120.1	4h 32m 7s	3	15	09/28/2010 12:17 PM	
B476	2004 CHEVROLET MALIBU	2011V932824084081	2004 CHEVROLET MALIBU	60.7	2h 0m 43s	2	9	09/22/2010 01:25 PM	
B498	2005 FORD TAURUS	1FAPPS5U4A227196	2005 FORD TAURUS	316.5	10h 48m 12s	6	29	09/30/2010 02:13 PM	
B551	2006 HONDA CIVIC HYBRID	JH0E596850010084	2006 HONDA CIVIC HYBRID	237.9	12h 5m 7s	5	23	10/01/2010 08:30 AM	
B519	2008 FORD TAURUS	1FAPPS5U4A227192	2008 FORD TAURUS	27.2	3h 4m 39s	10	67	10/01/2010 08:47 AM	
B520	2008 FORD TAURUS	1FAPPS5U4A229902	2008 FORD TAURUS	252.2	8h 34m 58s	6	28	09/30/2010 02:28 PM	
B523	2006 CHEVROLET MALIBU	2011V759K69429785	2006 CHEVROLET MALIBU	91.2	4h 58m 49s	7	50	09/30/2010 02:23 PM	
B526	2006 CHEVROLET MALIBU	2011V759K69435220	2006 CHEVROLET MALIBU	239.7	8h 38m 35s	6	46	09/30/2010 02:50 PM	
B530	2007 TOYOTA CAMRY HYBRID	4T1B8XK14U008332	2007 TOYOTA CAMRY HYBRID	72.0	3h 10m 24s	5	15	09/30/2010 05:28 PM	
B533	2008 FORD CROWN VICTORIA	2FAPFF1V48X102879	2008 FORD CROWN VICTORIA	433.1	17h 14m 6s	5	71	09/25/2010 07:59 PM	
B534	2008 FORD CROWN VICTORIA	2FAPFF1V48X102880	2008 FORD CROWN VICTORIA	766.3	33h 24m 37s	5	176	09/30/2010 01:15 PM	
B544	2007 CHEVROLET MALIBU	2011V759K69435468	2007 CHEVROLET MALIBU	219.2	8h 15m 23s	6	43	09/29/2010 10:32 AM	
B545	2007 CHEVROLET MALIBU	2011V759K69435468	2007 CHEVROLET MALIBU	398.0	15h 34m 18s	6	76	10/01/2010 09:24 AM	
B556	2007 DODGE CHARGER	283KA430674760373	2007 DODGE CHARGER	227.2	8h 14m 57s	9	51	10/01/2010 08:51 AM	
B557	2008 CHEVROLET MALIBU	2011V759K69435468	2008 CHEVROLET MALIBU	439.7	12h 44m 24s	5	35	09/30/2010 04:24 PM	
B561	2008 CHEVROLET MALIBU	2011V759K69435468	2008 CHEVROLET MALIBU	226.0	7h 48m 42s	5	28	10/01/2010 09:27 AM	
B572	2009 CHEVROLET MALIBU HYBRID	1G1ZF57508F228739	2009 CHEVROLET MALIBU HYBRID	9.7	45m 19s	3	9	09/30/2010 10:18 AM	

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Example: Utilization by Day Report



Report: Fleet Utilization - Utilization by Day Report

Selected Vehicle(s): All Vehicles

Report Run Date/Time: 09/06/2010 07:00 AM - 09/13/2010 07:00 AM

Report Time Period: 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 09/12/2010	Total
B446 2002 FORD TAURUS	1FAPPS020207677	2002 FORD TAURUS	2			2				4
B474 2004 CHEVROLET MALBU	1G1ZS52F4P239482	2004 CHEVROLET MALBU			4					4
B476 2004 CHEVROLET MPALA	2G1W152E24024081	2004 CHEVROLET MPALA					3			3
B480 2005 FORD TAURUS	1FAPPSU75A0227056	2005 FORD TAURUS			6	6	7	3		24
B501 2006 HONDA CIVIC HYBRD	JH0FA36236S009532	2006 HONDA CIVIC HYBRD					1			1
B520 2006 FORD TAURUS	1FAPPS020A0229902	2006 FORD TAURUS			6	3	2			11
B523 2006 CHEVROLET MALBU	2G1W155K09A030785	2006 CHEVROLET MALBU	2				9			11
B526 2006 CHEVROLET MPALA	2G1W155K09A030785	2006 CHEVROLET MPALA			2					2
B530 2007 TOYOTA CAMRY HYBRD	4T1B846K07000332	2007 TOYOTA CAMRY HYBRD	3			5	4			12
B533 2008 FORD CROWN VICTORIA	2FAPPP1V48X102879	2008 FORD CROWN VICTORIA			11		22	13		46
B534 2008 FORD CROWN VICTORIA	2FAPPP1V08X102880	2008 FORD CROWN VICTORIA	39	11				30	29	109
B544 2007 CHEVROLET MPALA	2G1W155K09A030785	2007 CHEVROLET MPALA	10	2		9	2			23
B546 2007 CHEVROLET MPALA	2G1W155K09A030785	2007 CHEVROLET MPALA	5			4				9
B557 2005 CHEVROLET MPALA	2G1W155K09A030785	2005 CHEVROLET MPALA	7	10	10	10	12			39
B561 2005 CHEVROLET MPALA	2G1W155K09A030785	2005 CHEVROLET MPALA			5					5
B572 2009 CHEVROLET MALBU HYBRD	1G1ZFS5709P228739	2009 CHEVROLET MALBU HYBRD	5			4	2			11
B573 2009 CHEVROLET MALBU HYBRD	1G1ZFS5709P228739	2009 CHEVROLET MALBU HYBRD	1			1	1			3
B586 2009 FORD EXPLORER 4WD	1FMEU73E30A41475	2009 FORD EXPLORER	7			14	14			35
B587 2010 TOYOTA CAMRY HYBRD	4T1B83KSAU120266	2010 TOYOTA CAMRY HYBRD	14			4	5			23
B588 2010 TOYOTA PRIUS	JTDKN3006A5120716	2010 TOYOTA PRIUS HYBRD	4			4	14			22
Totals			161	643	466	467	347	220	216	2493

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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

Report: Odd Hours

Selected Vehicle(s): All Vehicles
Report Run Date/Time: 10/01/2010 10:07 AM PDT
Report Time Period: 09/05/2010 12:00 AM - 09/13/2010 12:00 AM
Violation Time: 06:00 PM - 05:00 AM

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Vehicle	Start Time	End Time	Start Location	End Location
B030 2007 TOYOTA CAMRY HYBRID	09/09/2010 06:00 PM	09/09/2010 06:30 PM	2631 Chertown Rd, Redwood, CA 95062 US	1001 Milpitas Dr, Redwood, CA 95062 US
B533 2008 FORD CROWN VICTORIA	09/10/2010 06:00 PM	09/10/2010 07:30 PM	2022 Route 99, Santa Rosa, CA 95404 US	Santa Rosa, CA 95409 US
B533 2008 FORD CROWN VICTORIA	09/11/2010 07:17 PM	09/11/2010 07:53 PM	2742 Ventura Ave, Santa Rosa, CA 95403 US	Santa Rosa, CA 95409 US
B534 2008 FORD CROWN VICTORIA	09/08/2010 06:00 PM	09/08/2010 07:46 PM	1786 Summerfield Rd, Santa Rosa, CA 95405 US	Santa Rosa, CA 95409 US
B534 2008 FORD CROWN VICTORIA	09/07/2010 06:01 PM	09/07/2010 06:13 PM	5130 Peachtree Dr, Santa Rosa, CA 95409 US	Santa Rosa, CA 95409 US
B534 2008 FORD CROWN VICTORIA	09/11/2010 06:01 PM	09/11/2010 07:52 PM	5259 Old Redwood Hwy, Larkfield-Walpole, CA 95403 US	Santa Rosa, CA 95409 US
B534 2008 FORD CROWN VICTORIA	09/12/2010 06:01 PM	09/12/2010 07:00 PM	Santa Rosa, CA 95409 US	Santa Rosa, CA 95409 US
B557 2008 CHEVROLET IMPALA	09/08/2010 06:35 PM	09/08/2010 09:02 PM	2600 Midstate Ln, Santa Rosa, CA 95403 US	Santa Rosa, CA 95409 US
C080 2006 DODGE STRATUS	09/11/2010 06:00 PM	09/11/2010 07:49 PM	1202 Napa, South San Francisco, CA 94108 US	Santa Rosa, CA 95409 US
C102 2006 HONDA CIVIC HYBRID	09/07/2010 06:00 PM	09/07/2010 06:16 PM	6709 Bennett Valley Rd, CA 95404 US	6511 Francis Dr, Santa Rosa, CA 95403 US
C417 2008 CHEVROLET IMPALA	09/08/2010 06:35 PM	09/08/2010 08:58 PM	2600 Midstate Ln, Santa Rosa, CA 95403 US	Santa Rosa, CA 95409 US
C419 2008 FORD CROWN VICTORIA	09/08/2010 06:00 PM	09/08/2010 07:47 PM	10086 River Rd, CA 95430 US	Santa Rosa, CA 95409 US
C419 2008 FORD CROWN VICTORIA	09/07/2010 06:01 PM	09/07/2010 06:10 PM	7 Boas Dr, Santa Rosa, CA 95409 US	Santa Rosa, CA 95409 US
C419 2008 FORD CROWN VICTORIA	09/09/2010 06:01 PM	09/09/2010 06:59 PM	246 DuPont Ave, Santa Rosa, CA 95407 US	Santa Rosa, CA 95409 US
C419 2008 FORD CROWN VICTORIA	09/12/2010 06:00 PM	09/12/2010 07:58 PM	Santa Rosa, CA 95409 US	Santa Rosa, CA 95409 US
C424 2008 CHEVROLET MALIBU	09/09/2010 06:00 PM	09/09/2010 06:57 PM	555 Apple Ave, Santa Rosa, CA 95404 US	Duhamer, CA 95445 US
C424 2008 CHEVROLET MALIBU	09/07/2010 07:48 PM	09/07/2010 08:24 PM	Duhamer Ln, CA 95445 US	26 Ricona Dr, Redwood, CA 94562 US
C424 2008 CHEVROLET MALIBU	09/08/2010 06:48 PM	09/08/2010 12:44 AM	2660 Blacktail St, Santa Rosa, CA 95407 US	Duhamer Ln, CA 95445 US
C424 2008 CHEVROLET MALIBU	09/09/2010 06:01 PM	09/09/2010 08:19 PM	Duhamer Ln, CA 95445 US	581 Buckeye Dr, Windsor, CA 95402 US
C424 2008 CHEVROLET MALIBU	09/10/2010 07:18 PM	09/10/2010 09:01 PM	Duhamer Ln, CA 95445 US	581 Buckeye Dr, Windsor, CA 95402 US

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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

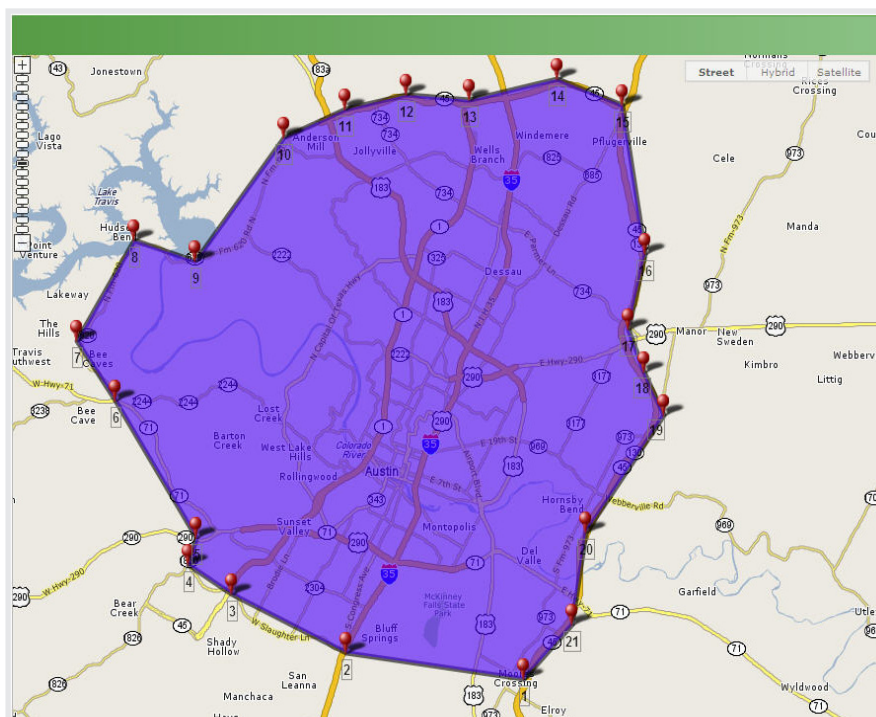
Government fleet managers can use wireless fleet management to place geofences in certain geographical areas to pinpoint vehicles that venture in and out of those areas. This can help track unauthorized vehicle usage and optimize routing.

- 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.

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.

- Example:
Geofence
Violation
Report**

**Example:
Geofence
Detail**



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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e-mail at sales@networkfleet.com.**