

June 8 – June 10, 2008 Town and Country Resort & Convention Center San Diego, CA





# **Telematics/GPS** What Can It Do for My Fleet??



### What We'll Cover:

What Should a GPS System Provide What Telematics Can Povide Implementation Considerations Cost Concerns Impact on Your Jurisdiction What's in the Future for this Tech.



GPS – Telematics What's the Difference??

### GPS - Provides Location Based Information

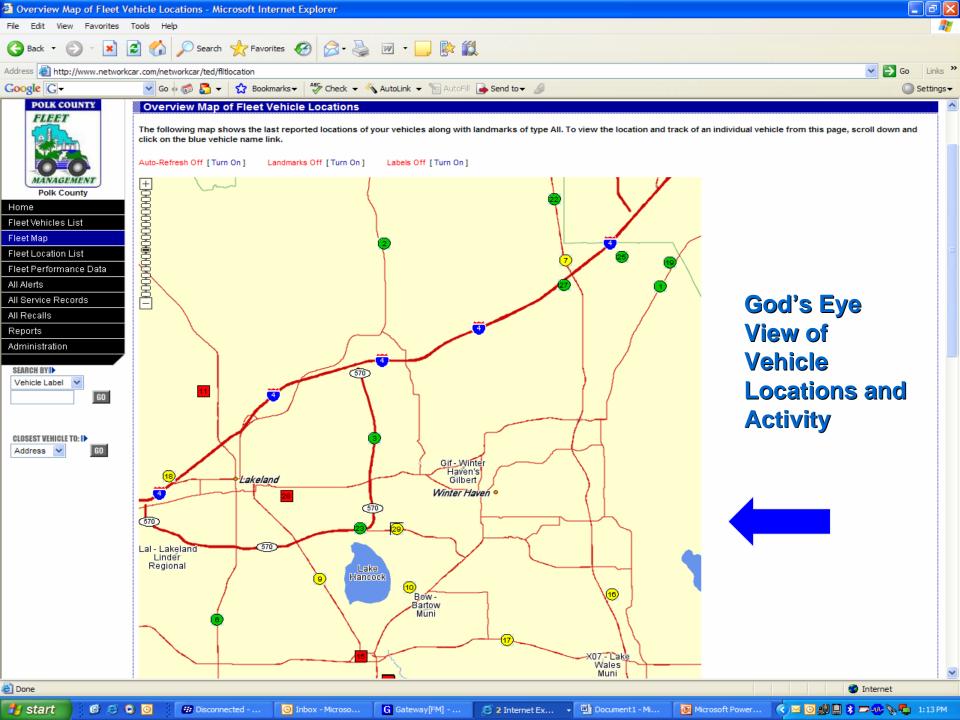
Telematics - Provides Vehicle
 Performance Based Information

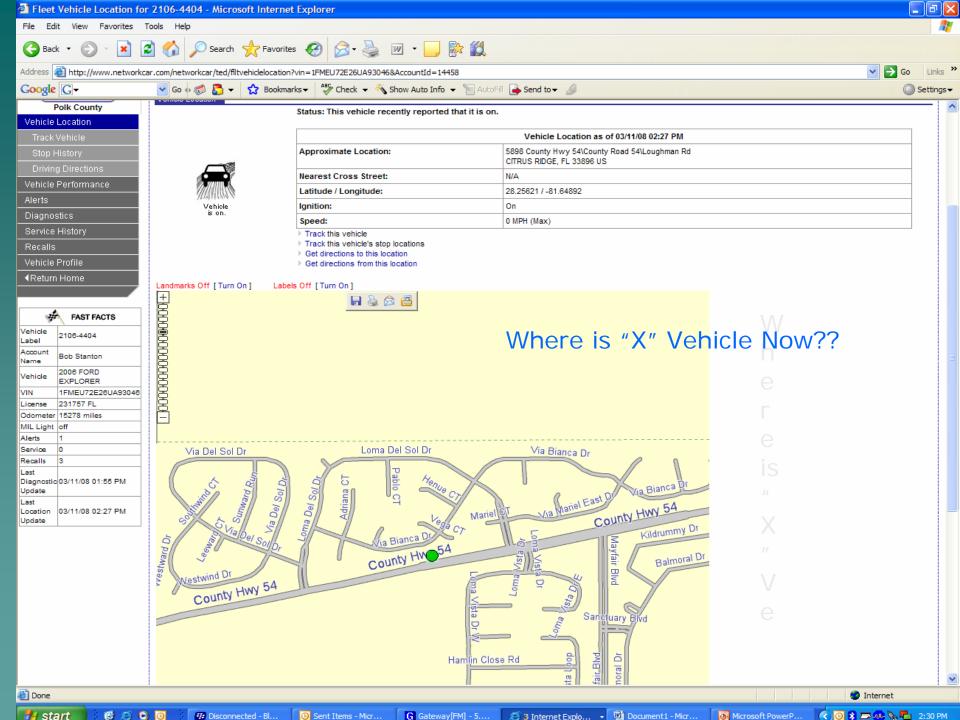
Some Systems Offer Both

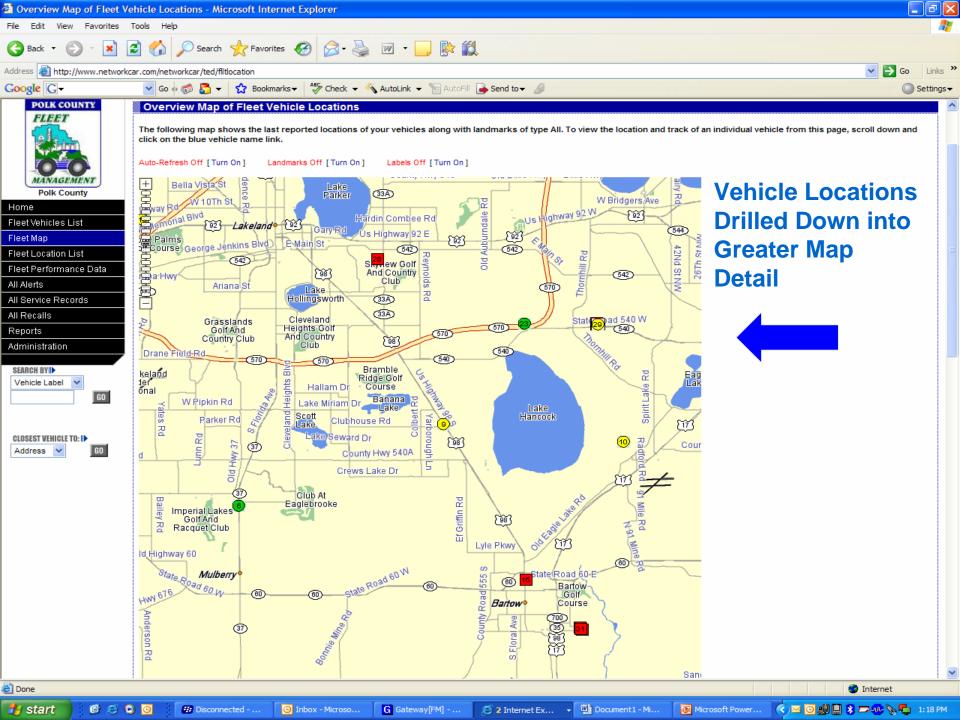


## What GPS Should Provide:

 Stop Detail e.g. Location, Duration Mapping Tools Vehicle Activity/Day Drive Time Summaries Odd Hour Vehicle Usage Idle Time Summaries Geo Fencing (Security)







Fleet Vehicle Stop Detail Report - Microsoft Internet Explorer provided by Polk County BoCC									
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp					A				
🕞 Back - 🐑 - 🖹 🛃 🏠 🔎 Search 🔆 Favorites 🧭 😒 - 🌺 🕅 - 📴 🏠									
Address 🕘 http://www.networkcar.com/networkcar/ted/filtstopdetailreport?groupId=1564&VehicleId=6378&startStr=04%2F02%2F2008&starthour=00&startminute= 💙 ラ Go 🛛 Links 🌺									
Google 🕞 🗸 🔽 🔽 Go 🗄 🌍	★ Bookmarks     ★     ★     Check      ★	🐔 Show Auto	Info 👻 📔 AutoFill 🛛	🎍 Send to 👻 🖉	🔘 Settings 🗸				
Total Time Interval	1 Day				^				
Total Travel Time	00:07:32								
Number of Stops	8			Stop Dotail Uc					
Total Distance Traveled*	116.95 miles			Stop Detail He	i e				
Speed	73	Sto	op Legend						
Time of First Start	04/02/08 08:05 AM	Green Stops	s < 15 min						
Time of Last Stop	04/02/08 05:07 PM	Yellow Stops	s >= 15 min and < 60 min						
Last Update Time	04/29/08 04:08 PM	Red Stops	s >= 60 min						

Click here to	view a	man	of ALL	stop	locations:
CIICK HELE ID	10 W G	map	ULALL	atop	locations, see

¥

	Section 2: Trip Detail for 2104-4413 from 04/02/08 12:00 AM to 04/03/08 12:00 AM												
		Trip Begin	Trip Dura	tion	Trip End	Stop Dura	ition	Trip	Total	Location Address	Мар	Speed	1
	#	Time	Days : Hours : Minutes	Minutes	Time	Days : Hours : Minutes	Minutes	Distance*	Distance*		Plot	(MPH)	
	1	04/02/08 08:05 AM	00:01:58	118	04/02/08 10:02 AM	00:00:03	3	43.23 miles	43.23 miles	567 Highlands Reserve Blvd HAINES CITY, FL 33897 US	⊕	73	
	2	04/02/08 10:05 AM	00:02:00	120	04/02/08 12:05 PM	00:00:15	15	21.46 miles	64.69 miles	8296 Champions Gate Blvd CITRUS RIDGE, FL 33896 US		60	
	3	04/02/08 12:20 PM	00:00:33	33	04/02/08 12:53 PM	00:00:04	4	5.28 miles	69.97 miles	6400 Old Kissimmee Rd LOUGHMAN, FL 33896 US	⊕	47	
	4	04/02/08 12:58 PM	00:01:12	72	04/02/08 02:10 PM	00:00:03	3	18.14 miles	88.11 miles	1002 Dunson Rd\Waverly Barn Road 4 CITRUS RIDGE, FL 33896 US		65	
	5	04/02/08 02:12 PM	00:00:17	17	04/02/08 02:29 PM	00:00:44	44	1.58 miles	89.69 miles	Access Rd NW HAINES CITY, FL 33897 US		41	
	6	04/02/08 03:13 PM	00:00:24	24	04/02/08 03:38 PM	00:00:00	1	0.19 miles	89.88 miles	Access Rd NW HAINES CITY, FL 33897 US		9	
e	Done												

🖹 Veh	icle Stop Deta	il and Idle Time	Report - M	icrosoft Interr	et Explorer						∎₽			
File I	Edit View Fav	orites Tools He	lp									<b>.</b>		
G	ack • 🕥 •	🖹 🛢 🏠	Search	Favorites	🛛 🖉 🖓	₩ •	<mark>-</mark> 🖹	<b>X</b>						
	dress $dress$ http://www.networkcar.com/networkcar/ted/fltsoftstopreport?VehicleId=22422&startStr=02%2F25%2F2008&starthour=00&startminute=00&days=5&idleThreshold=5&savGrpId=&GroupNm=All+Vehicles&VinName=&Landn 💟 $D$ Go Links $P$													
Goog	le G-	🖌 Go	o 🌮 🌄 🗸	Bookmark	ks 🗸 😽 Check 👻 🍕	Show A	uto Info 🔻 🃔	AutoFill 🔒 Ser	-		Settin	gs▼		
1e				AM	00:00:57 {Idle Stop}	N/A			6995 Grady Mock Rd LAKELAND, FL 33809 US	œ		^		
1f				02/25/08 12:55 PM	00:00:22 {Idle Stop}	N/A			6104 SR-37\S Florida Ave MEDULLA, FL 33813 US	۲				
1g				02/25/08 01:56 PM	00:00:18 {Idle Stop}	N/A			6727 Crews Lake Rd BARTOW, FL 33813 US	۲				
1h				02/25/08 02:36 PM	00:00:37 {Idle Stop}	N/A			2801 Meridian Point Ln LAKELAND, FL 33812 US					
1i				02/25/08 03:17 PM	00:00:14 {Idle Stop}	N/A			2904 County Hwy 540A\E County Road 540A\Boy Scout Ranch Rd LAKELAND, FL 33813 US	۲				
2	02/26/08 07:45 AM	00:02:08	128	02/26/08 09:53 AM	00:00:04	4	25.00 miles	99.00 miles	897 NE 9th Ave MULBERRY, FL 33860 US	۲	63			
2a				02/26/08 08:23 AM	00:00:08 {Idle Stop}	N/A			3002 Blown Feather Ln BARTOW, FL 33860 US					
2b				02/26/08 08:35 AM	00:00:34 {Idle Stop}	N/A			3314 Cross Fox Dr BARTOW, FL 33860 US	۲				
2c				02/26/08 09:14 AM	00:00:24 {Idle Stop}	N/A			5230 Misty Lake Dr BARTOW, FL 33860 US					
3	02/26/08 09:58 AM	00:05:38	338	02/26/08 03:36 PM	00:00:55	55	38.00 miles	137.00 miles	6171 SR-540\County Hwy 540\Winter Lake Rd\State Road 540 W WINTER HAVEN- AUBURNDALE, FL 33880 US	<b>(</b>	62			
3a				02/26/08 10:09 AM	00:01:09 {Idle Stop}	N/A			4858 Pheasant Dr BARTOW, FL 33860 US					
Зb				02/26/08 11:51 AM	00:01:28 {Idle Stop}	N/A		376 W Carter Rd LAKELAND HIGHLANDS, FL 33813 US		۲				
3c				02/26/08 01:37 PM	00:00:26 {Idle Stop}	N/A					2026 Indian Trails Ct\N Trails Ct BARTOW, FL 33813 US	۲		=
3d				02/26/08 02:34 PM	00:00:08 {Idle Stop}	N/A			4177 Thornhill Rd WINTER HAVEN-AUBURNDALE, FL 33880 US	۲				
3e				02/26/08 02:44 PM	00:00:49 {Idle Stop}	N/A			7215 SR-540\County Hwy 540\Winter Lake Rd\State Road 540 W WINTER HAVEN- AUBURNDALE, FL 33880 US	۲				
4	02/26/08 04:31 PM	00:00:00	1	02/26/08 04:32 PM	00:15:28	928	N/A	137.00 miles	6288 SR-540\County Hwy 540\Winter Lake Rd\State Road 540 W WINTER HAVEN- AUBURNDALE, FL 33880 US	۲	N/A			
5	02/27/08 08:00 AM	00:07:23	443	02/27/08 03:23 PM	00:15:08	908	97.00 miles	234.00 miles	6171 SR-540\County Hwy 540\Winter Lake Rd\State Road 540 W WINTER HAVEN- AUBURNDALE, FL 33680 US	۲	67			
5a				02/27/08 08:49 AM	00:00:32 {Idle Stop}	N/A			5172 Ashwood Dr MEDULLA, FL 33811 US	۲				
5b				02/27/08 10:20 AM	00:00:06 {Idle Stop}	N/A			Unnamed Street BARTOW, FL 33860 US	۲				
5c				02/27/08 10:32 AM	00:00:18 {Idle Stop}	N/A			3334 Cross Fox Dr BARTOW, FL 33860 US	۲				
5d				02/27/08 11:11 AM	00:00:57 {Idle Stop}	N/A			4241 SR-60\State Road 60 W\SR-60 W WILLOW OAK, FL 33860 US	۲				
5e				02/27/08 12:40 PM	00:00:33 {Idle Stop}	N/A			Sundance Blvd BARTOW, FL 33860 US					
5f				02/27/08 01:27 PM	00:00:22 {Idle Stop}	N/A			1658 County Hwy 540A\E County Road 540A\Scott Lake Rd BARTOW, FL 33813 US					
5g				02/27/08 01:59 PM	00:00:35 {Idle Stop}	N/A			6508 Tillery Rd LAKELAND, FL 33813 US			~		
e)										Interne	t			

🐉 start 🚽

Fleet Drive Time Summary	Report - Microsoft	Internet Expl	orer provide	d by Polk Cou	nty BoCC					X
<u>Fi</u> le <u>E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> o	ools <u>H</u> elp									<b>7</b>
🕞 Back 👻 🐑 💌 🛃	Search	K Favorites	🙆 🔗	🎍 🗹 •	📃 除 🕯	á.				
Address 🕘 http://www.networkcar	r.com/networkcar/ted/fllt	drivesummaryre	port?groupId=15	64&startStr=04%	62F02%2F20088	&starthour=00&st	artminute=00&da	ys=18 💙 🔁	Go Link	s »
Google G-	💌 Go 🚸 🌍 🌄 👻	🔂 Bookmark	s 🗸 😽 Check	👻 🔦 AutoLink	k 👻 📔 AutoFil	🧯 Send to 🗸	S		Setting	gs▼
Click on a Vehicle Label for that veh	nicle's Trip Detail.			1		1		1	1	-
Vehicle Label	VIN	Number of	Distance	Total Tra	avel Time	Time of First	Time of Last	Speed	Last	
		Stops	Traveled*	Days : Hours : Minutes	Minutes	Start	Stop		Update Time	
2101-3245	1FTNF21L41EC01476	5	93	00:04:48	288	04/02/08 08:33 AM	04/02/08 03:03 PM	75	04/29/08 04:11 PM	
2101-5492	1FMYU021X1KF73440	6	110	00:04:28	268	04/02/08 06:33 AM	04/02/08 03:46 PM	63	04/25/08 03:25 PM	
2102-5409	1FTYR10D42PA72413	0	N/A	N/A	N/A	N/A	N/A	N/A	04/29/08 04:09 PM	Ш
2102-5416	1FTYR10D82PB39143	0	N/A	N/A	icle		N/A	N/A	03/25/08 11:09 AM	
2103-5412	1FTYR10D82PB39143 1FTYR10D63PA46493 1FTYR10D83PA46493 1FTYR10D83PA46493 <b>Drive Tim</b> 446497	0	NA	by Ver	N/A	N/A	N/A	N/A	04/25/08 08:59 AM	
2103-5413	1FTYR10D83PA46491	ne sum	N/A	N/A	N/A	N/A	N/A	N/A	03/25/08 11:06 AM	
2103-5416	Drive 46497	0	N/A	N/A	N/A	N/A	N/A	N/A	04/29/08 01:55 PM	
2103-5433	1FTZR44V73PB19640	10	263	00:06:48	408	04/02/08 08:25 AM	04/02/08 04:37 PM	67	04/29/08 04:10 PM	
2103-5716	1FTRF17W93NA25704	5	60	00:01:48	108	04/02/08 09:29 AM	04/02/08 12:09 PM	67	04/29/08 03:40 PM	
							A 4100100 00 05		04/29/08	~
ど Done								🥝 Internet		

Reports: Enter Values for	a Odd Hours Report - Microsoft In	nternet Explorer provided by Polk Count	ty BoCC							
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>1</u>	[ools <u>H</u> elp									
🕞 Back 🔹 🐑 🔹 🚺	🛐 🏠 🔎 Search   travorites	🥝 🎯 · 🌺 🗹 · 🧾 除 🛍	1							
Address 🙆 http://www.networkca	ar.com/networkcar/ted/filtoddhoursinput?g	roupId=1565&sl_pagesize=0	~	🄁 Go 🛛 Links 🂙						
Google G-	🔽 Go 🗄 🌍 🌄 👻 🏠 Bookmark	sə 🛛 🍄 Check 🐱 🐔 AutoLink 👻 📔 AutoFill	👍 Send to 🗸 🖉	Settings -						
				~						
POLK COUNTY	Reports: Enter Values for a	Odd Hours Report								
FLEET	This printable report shows all ODD Why this report is useful: The ODD H(	HOUR DRIVE TIMES for a vehicle or all vehicles DURS REPORT allows you to quickly identify after h f company vehicles. You can lower overhead by e	ours driving-time violations for a single fleet ve							
MANAGEMENT	decrease inaccurate time sheet entries. F vehicles being used after hours.	or example, if vehicles are to only be used for busi	iness during business hours, this report will he	slp identify						
Polk County	PLEASE NOTE: The generated report will	show up to two ODD HOURS uses per day. If the s	selected report period spans two days up to f	our violations						
Home	PLEASE NOTE: The generated report will show up to two ODD HOURS uses per day. If the selected report period spans two days, up to four violations will be shown.									
Fleet Vehicles List	Report example: View a copy of the Ol	DD HOURS REPORT.								
Fleet Map			t are modeled. Once your area the CUR	utt hutten						
Fleet Location List		mply complete the form below. Fields marked with a Please be patient as your request is being process								
Fleet Performance Data	minutes to be processed, depending on the	he volume of information and report selected.		≡						
All Alerts		Fleet Odd Hours Report								
All Service Records	Vehicle Group*	POLK COUNTY - UTILITY OPERATIONS	Please select a vehicle group.							
All Recalls Reports	Vehicle(s)*	All vehicles in the group	Select either a groupwide or single vehicle	report.						
Administration	Start Date*	04/04/2008	The start date must be within the last 90 day entered as MM/DD/YYYY.	ys and						
SEARCH BY	Number of Days to Display	3 🗸	This report can be run for 7 days at a time. is one day.	The default						
Vehicle Label V	Violation Window	10 PM 💙 to 5 AM 💙	The default violation period for this report is 5:00 AM.	a 10:00 PM -						
		Submit								
Address GO	Return to reports home									
🙆 Done			🔲 🥥 Intern	iet 🚲						

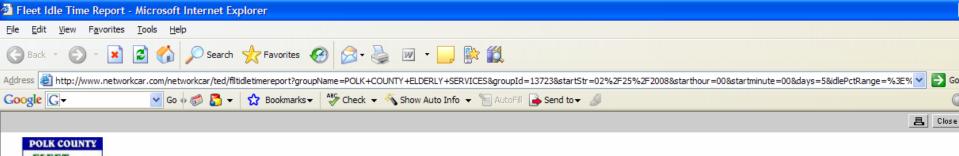
E Done

le Edit view Favorites I	oois Heip		<b>1</b>
3 Back 👻 🕑 👻 😫	👌 🏠 🔎 Search   🛧 Fi	avorites 🚱 🔗 - 嫨 📨 - 📴 除 鑬	
ldress 🙋 http://www.networkca	ar.com/networkcar/ted/filtoddhour	sreport?vin=1FTRW12W07FA29549&startStr=02%2F29%2F2008&days=3&starthour=22&finhour=05&s ⊻	🄁 Go 🛛 Links 🂙
oogle G-	🔽 Go 🚸 🌍 🌄 👻 😫	ookmarks 🗸 🦓 Check 👻 🔨 Look for Map 👻 📔 AutoFill 🍙 Send to 🗸 🖉	Settings •
leport Overview			^
violation Window	10:00 PM - 05:00 AM		
leport Run Date/Time	03/11/08 02:43 PM	Odd Hours Report	
leport Time Period	02/29/2008 - 03/03/2008		
elected Vehicle	2107-5706		
Export Data Export this report data to a Microsoft Excel spreadsheet.		ret.	
Schedule Report Schedule this Re	port.		
Printer Friendly View this report i	in a printable format.		
1			

Odd Hours Report for 2107-5706:
---------------------------------

riday, February 29, 2008				
	Time	Location Address	Map Plot	View Detail
violation begin time:	02/29/08 10:00 PM	743 US-17\E Alfred Dr\US-92\E Lake Alfred St LAKE ALFRED, FL 33850 US	$\oplus$	
violation end time:	02/29/08 10:06 PM	185 E Main St LAKE ALFRED, FL 33850 US	⊕	
aturday, March 01, 2008				
	Time	Location Address	Map Plot	View Detail
violation begin time:	03/01/08 10:00 PM	4294 US-17\US Highway 17 N WINTER HAVEN-AUBURNDALE, FL 33830 US	€	
violation end time:	03/02/08 12:13 AM	Driveway LAKE WALES, FL 33859 US	€	
unday, March 02, 2008				
	Time	Location Address	Map Plot	View Detail
violation begin time:	03/02/08 11:16 PM	3840 Connersville Rd BARTOW, FL 33830 US	€	
violation end time:	03/03/08 12:17 AM	185 E Main St LAKE ALFRED, FL 33850 US	⊕	

🗿 Fleet Odd Hours Report - Microsoft Internet Explorer provided by Polk County BoCC										
File Edit View Favorites Tools Help										
🕞 Back 🔹 🐑 👻 😰 🏠 🔎 Search 🧙 Favorites 🚱 😒 - 🌺 📨 - 📴 🏠										
Address 🕘 http://www.networkcar.com/networkcar/ted/filtoddhoursreport?groupId=1565&vin=&startStr=04%2F04%2F2008&days=3&starthour=22&finhour=05&sa 🗸 🕞 Go 🛛 Links 🌺										
Google 🖸 - Go I III → Go IIII → Go IIII → Gookmarks → 🖓 Bookmarks → 🖓 Check → 🗞 Look for Map → 🚡 AutoFill → Send to → 🖉 () Settings →										
Odd Hours Report for 2	2103-3202:									
Saturday, April 05, 2008										
	Time	Location Address	Map Plot	View Detail						
Violation begin time:	04/05/08 10:00 PM	1322 County Hwy 655A\Alturas Rd BARTOW, FL 33830 US	<b>()</b>							
Violation end time:	04/06/08 12:37 AM	1322 County Hwy 655A\Alturas Rd BARTOW, FL 33830 US	$\oplus$							
Odd Hours Report for 2	2103-5721:									
Sunday, April 06, 2008										
	Time	Location Address	Map Plot	View Detail						
Violation begin time:	04/06/08 03:34 AM	3564 Jennings Rd HAINES CITY, FL 33898 US	⊕							
Violation end time:	04/06/08 04:57 AM	34 Tangelo St LAKE WALES, FL 33898 US	$\oplus$		=					
Violation begin time:	04/06/08 10:00 PM	4624 US-27 Alt\N Scenic Hwy\SR-17 LAKE WALES, FL 33898 US	$\oplus$							
Violation end time:	04/07/08 02:48 AM	3579 Jennings Rd HAINES CITY, FL 33898 US								
Odd Hours Report for 2	2107-4413:									
Sunday, April 06, 2008										
	Time	Location Address	Map Plot	View Detail						
Violation begin time:	04/06/08 10:01 PM	8939 N Campbell Rd LAKELAND, FL 33810 US	$\oplus$							
Violation end time:	04/07/08 03:15 AM	8797 Pebblebrooke Way LAKELAND, FL 33810 US								
Odd Hours Report for 3	3102-3210:				]					
Monday, April 07, 2008										
	Time	Location Address	Map Plot	View Detail						
Violation begin time:	04/07/08 02:03 AM	174 Vaughn Rd\20th St SW WINTER HAVEN-AUBURNDALE, FL 33880 US								
Violation end time:	04/07/08 02:06 AM	3051 Sheffield Rd WINTER HAVEN-AUBURNDALE, FL 33880 US	۲							
Odd Hours Report for 3	3107-2604:									
Sunday Anril 06 2008										
ど Done			🔮 Inte	ernet						



FLEET MANAGEMENT Polk County

Fleet Idle Time Report

.

Report Overview						
Vehicle Group	POLK COUNTY ELDERLY SERVICES					
Number of Vehicles in Group	9					
Number of Vehicles Shown	9					
Percentage of Group Shown	100%					
Idling Threshold - %	>= 10.0					
Average Idle Time - %	29%					
Average Idle Time - Hours	2.7					
Total Idle Time - Hours	24.3					
Total Operating Hours	78.9					
Average Speed	29					
Total Miles Driven	1,585					
Average Miles Driven per Day	317					
Report Run Date/Time	03/11/08 12:38 PM					
Report Time Period	02/25/08 12:00 AM - 03/01/08 12:00 AM					
Export Data Export this report data to a Microsoft Excel spreadsheet.						
Schedule Report Schedule this Report.						
Printer Friendbr						

Printer Friendly View this report in a printable format.

#### **Idle Summary to the Left**



Fleet Idle Time Report - Microsoft Internet Explorer		J 🗙	K			
Eile Edit View Favorites Tools Help			l			
🕞 Back 🔹 🐑 🔹 🛃 🏠 🔎 Search 🧙 Favorites 🚱 🔗 😓 👿 🔹 🤤 🛍						
Address 🕘 http://www.networkcar.com/networkcar/ted/filtidletimereport?groupName=POLK+COUNTY+ELDERLY+SERVICES&groupId=13723&startStr=02%2F25%2F2008&starthour=00&startminute=00&days=5&idlePctRange=%3E% 💙 🄁 G	o I	Links ×	»			
Google 🖸 🗸 🔽 Go 🖟 🚿 🎦 👻 Bookmarks 🗸 🍄 Check 👻 🐴 Show Auto Info 👻 🔚 AutoFill 🔒 Send to 🗸 🖉 Send to 🗸 🖉						
Schedule Heport Schedule this Report.		^	~			
Printer Friendly View this report in a printable format.						
Idle Detail Report						

Idle Time Rep	ort													
							Actual Idle % Compared to Idle % Threshold							
Vehicle Label	VIN	Year Make Model	Starting Mileage	Ending Mileage	Distance Traveled (Miles)	% of the Time Vehicle Was Idling	% Time Idling Difference	Idle Hours	Drive Hours	Total Operating Hours	Max Speed Range	Average MPH	Vehicle Begin Date	Vehicle End Date
2108-3414	1FBNE31L08DA45322	2008 FORD E- 350	3862	4252	390	33%	23%	6.2	12.5	18.6	60.0-70.0	31	02/25/08 06:28 AM	02/29/08 08:16 AM
2108-3420	1FBNE31L18DA45328	2008 FORD E- 350	516	652	136	24%	14%	1.2	3.9	5.1	60.0-70.0	35	02/25/08 08:31 AM	02/29/08 08:45 AM
2108-3415	1FBNE31L28DA45323	2008 FORD E- 350	1705	1857	152	42%	32%	4.3	6.0	10.2	70.0-80.0	25	02/25/08 08:24 AM	02/29/08 08:05 AM
2108-3421	1FBNE31L38DA45329	2008 FORD E- 350	1582	1799	217	28%	18%	3.1	8.1	11.2	60.0-70.0	27	02/25/08 08:43 AM	02/29/08 09:06 AM
2108-3416	1FBNE31L48DA45324	2008 FORD E- 350	1215	1350	135	30%	20%	2.5	5.8	8.4	60.0-70.0	23	02/25/08 09:32 AM	02/29/08 09:24 AM
2108-3417	1FBNE31L68DA45325	2008 FORD E- 350	3282	3500	218	31%	21%	3.6	7.8	11.4	60.0-70.0	28	02/25/08 06:28 AM	02/28/08 06:26 AM
2108-3418	1FBNE31L88DA45326	2008 FORD E- 350	1392	1535	143	24%	14%	1.3	3.9	5.2	70.0-80.0	36	02/25/08 08:40 AM	02/29/08 08:04 AM
2108-3413	1FBNE31L98DA45321	2008 FORD E- 350	1201	1322	121	21%	11%	1.1	4.3	5.5	50.0-60.0	28	02/25/08 09:15 AM	02/29/08 09:25 AM
2108-3419	1FBNE31LX8DA45327	2008 FORD E- 350	1067	1140	73	29%	19%	1.0	2.4	3.4	70.0-80.0	31	02/25/08 07:24 AM	02/29/08 08:18 AM

Display Report Legend

Display Next Steps

day



Compared to Drive Hours – YIKES!!

Copyright © 2001-2007 by Networkcar

Questions? E-mail customercare@networkcar.com or call 1-866-227-7323, Monday through Friday 8am-11pm EST and Saturday 10am-8pm EST.

ど Done

Show 50 🖌 per page. 😡



### **Telematics Should Provide:**

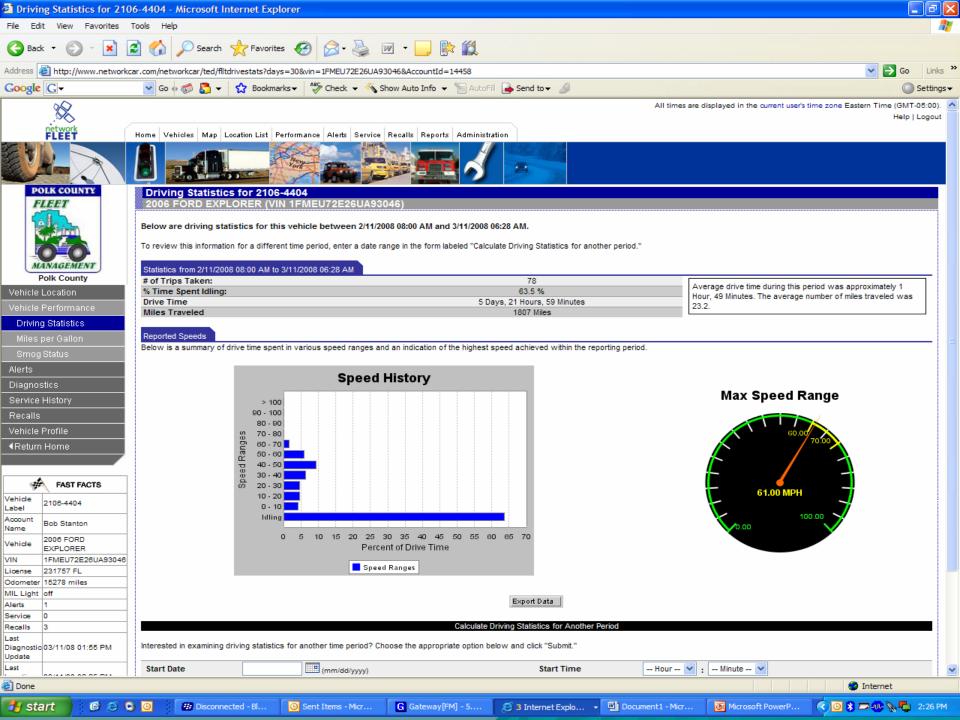
Speed History & Detail
Trouble Code Alerts and Notification
Fuel Usage & MPG Reporting
PM Due Alerts
Recall Alerts
Vehicle Performance Reports

Reports: Enter Values for	Fleet Speed Violations Report - M	icrosoft Internet Explorer provided by Pol	lk County BoCC				
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u>	<u>F</u> ools <u>H</u> elp			<b>1</b>			
🕞 Back 🔹 🐑 🔺 🙀	🛐 🏠 🔎 Search 🤺 Favorites	🚱 🔗 · 🌺 🗹 · 🧾 除 🛍					
Address 🕘 http://www.networkca	ar.com/networkcar/ted/flltspeedviolationinp	ut?groupId=1544&sl_pagesize=0	✓ →	Go Links »			
Google G-	🔽 Go 🐗 🧭 🎦 👻 😭 Bookmarks	•		🔘 Settings 🗸			
Image: Product of the product of th							
All Alerts		Fleet Speed Violations Report					
All Service Records	Vehicle Group*	POLK COUNTY - EMS	Please select a vehicle group.				
All Recalls Reports	Vehicle(s)*	2108-5708 (VIN: 1FTPW12V48FA27853)	Select either a groupwide or single vehicle rep	ort.			
Administration	Start Date*	04/02/2008	The start date must be within the last 90 days a entered as MM/DD/YYYY.	ind			
SEARCH BY	Start Time	12 AM 💙 : 00 💙	Selecting a start time is optional. The default is AM.	s 12:00			
Vehicle Label V	Number of Days to Display	2 🗸	This report can be run for 7 days at a time. The default is one day.         Select the SPEED violation threshold for the report. This is the minimum PERMITTED speed. The default is 55 MPH.				
	Maximum Speed Allowed	70					
Address CONTRACTOR CLOSEST VEHICLE TO:		Submit					
	▶ Return to reports home		· • • • • •	_			
ê			🔳 🔮 Internet				

Fleet Speed Violatio	ns Report -	Microsoft Internet Explo	orer provide	ed by Polk County	BoCC				
<u>F</u> ile <u>E</u> dit <u>V</u> iew F <u>a</u> vori	jile <u>E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp								
🕞 Back 🔹 🐑 👻 📓 🏠 🔎 Search 🤶 Favorites 🧭 🔗 🖓 👻 🔛 👻 📴 🐇									
Address 🙆 http://www.ne	tworkcar.com/	networkcar/ted/flltspeedviolatio	onreport?grou	pId=1544&vin=1FTPW	12V48FA27853&startStr=04%2F02%2F2008☆	thour=0 🔽 🄁 Go 🛛 Links 🎽			
Google G-	<b>~</b> (	Go 🐗 🍏 🎦 👻 🔂 Bookr	marks 🗸 🕺	Check 👻 🐔 AutoLir	nk 👻 📔 AutoFill 🔒 Send to 🗸 🖉	🔘 Settings 🗸			
Polk County						<u> </u>			
Report Overview		70 mah							
Violation Threshold		70 mph							
Total Violations		32 violations							
Report Run Date/Time		4/30/08 08:46 AM							
Report Time Period Selected Vehicle	04/02/08 12	:00 AM - 04/04/08 12:00 AM 2108-5708							
						≡.			
Export Data Export this re	eport data to a	Microsoft Excel spreadsheet.							
Schedule Report Schedule	this Report.								
Printer Friendly View this	report in a prir	ntable format.							
Mada adam Andi 02, 20									
Wednesday, April 02, 20		Malatian Time		Sec. et	L 4	New Plat			
	Vehicle Label Violation Time			Speed	Location	Map Plot			
2108-5708		09:25 AM		75	27.9479 / -81.7930	<b>()</b>			
2108-5708		09:27 AM		73	27.9239 / -81.8217				
2108-5708		11:12 AM		75	27.9194 / -81.8241				

	Done Done				🥑 Internet
Ш	0400 E700	02-50 DM	70	07 0/40 / 04 70c0	ጠ
	2108-5708	02:38 PM	71	28.0654 / -81.7618	<b>#</b>
	2108-5708	11:14 AM	78	27.9457 / -81.7957	<b>(</b>
	2108-5708	11:12 AM	75	27.9194 / -81.8241	₩
	2108-5708	09:27 AM	73	27.9239 / -81.8217	œ

~



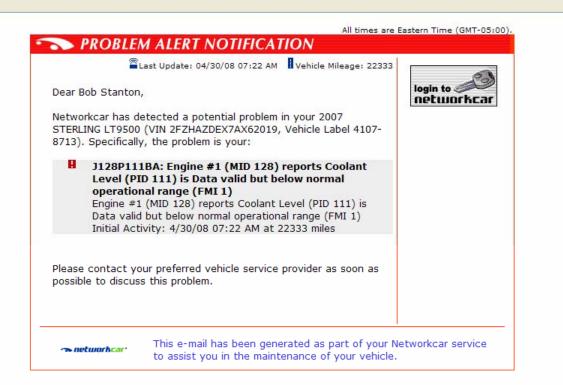
Eile Edit View Insert Format Tools Actions Help

🗄 🗛 Reply | 🖓 Reply to All | 🙈 Forward | 🎒 📭 | 😼 | 🔻 | 🍅 | 🎦 🗙 | 🔺 🔹 🔹 🗚 🕯 🚱

From: Networkcar [fleetadmin@networkcar.com]

To: Stanton, Bob Cc:

Subject: Networkcar Alert Notification



Copyright © 2001-2007 by Networkcar

Questions? E-mail customercare@networkcar.com or call 1-866-227-7323, Monday through Friday 8am-11pm EST and Saturday 10am-6pm EST.

Sent: Wed 4/30/2008 7:24 AM

B X

Reports: Enter Values for	a Fuel Usage and MPG Report - M	icrosoft Internet Explorer provided by Po	Ik County BoCC						
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u>	ools <u>H</u> elp		Ar						
🚱 Back 🔹 🐑 💌 🙎	Search 📌 Favorites	🚱 🍛 · 🌺 🔟 · 🧫 🗱							
Address 🕘 http://www.networkca	ar.com/networkcar/ted/filtmpginput?groupI	l=1548&sl_pagesize=0	So Links »						
Google G-		🕶 😽 Check 👻 🐔 AutoLink 👻 📔 AutoFill 🛛	Send to 🗸 🖉 Settings 🗸						
SEARCH BY	minutes to be processed, depending on th	e volume of information and report selected.	s						
GO GO		Fuel Usage and MPG Report							
	Required Fields								
	Vehicle Group*	POLK COUNTY - FLEET MGMT	Please select a vehicle group.						
Address VEHICLE TO: II)	Start Date*	04/07/2008 12 AM 🕶 : 00 🕶	The start date must be within the last 90 days and entered as MM/DD/YYYY.						
	End Date*	04/11/2008 12 AM 💙 : 00 💙	This report can be run for up to 31 days at a time. Please enter the end date as MM/DD/YYYY.						
	Optional Fields								
	Fuel Price per Gallon	\$ <mark>3.12</mark>	If desired, enter the price currently being paid for fuel and the report will use this value for estimating how much money was spent on fuel during report period.						
			Click here to check gas prices around the nation.						
	Limit Report Results by Creating an	Exception Report							
	recommend running this report initially with		performing above or below a designated threshold. We know what is typical for your fleet or a particular group,						
	Report will only show vehicles that meet the designated criteria, except for vehicles that do not report the information necessary for calculating the values on the report.								
	MPG Threshold	<= Less than or equal to MPG	Enter a straight MPG value, a value in gallons, or a combination of both.						
	Gallons Consumed Threshold	None 💟 gallons	Entering an MPG threshold will display gallons saved and cost savings based on the entered threshold. If a gallons threshold is entered, the report will show a gallons consumed difference and fuel cost. If MPG and gallons thresholds are both entered, will all be displayed gallons saved, cost savings, gallons consumed difference, and fuel cost.						
		Submit							
Done			Internet						

🕘 Fuel Usa	age and MPG Report	- Microsoft Inter	net Explorer	r provided b	y Polk County Bo	сс					X	
<u>File E</u> dit	<u>V</u> iew F <u>a</u> vorites <u>T</u> ool	ls <u>H</u> elp									1	
G Back	🕞 Back 🔹 🕑 👻 😰 🏠 🔎 Search 👷 Favorites 🤣 😥 - 🌺 🔟 - 📃 🎼 🎇											
A <u>d</u> dress 🙆 H	Address 🕘 http://www.networkcar.com/networkcar/ted/filtmpgreport?startStr =04%2F07%2F2008&starthour =00&startminute =00&finishStr =04%2F11%2F2008&finh 💟 🄁 Go Links											
Google C→       Go \$\$\$ \$\$\$ \$\$\$ \$\$\$ \$\$\$ \$\$\$\$ \$\$\$\$ \$\$\$\$\$\$\$\$											js <b></b> ▼	
										^		
Fuel Usage	and MPG Report											
Vehicle Label	VIN	Year Make Model	Starting Mileage	Ending Mileage	Distance Traveled (Miles)	Vehicle Fuel Cost (\$)	Gallons Consumed	MPG	Vehicle Begin Date	Vehicle End Date		
2101-3263	1FTNF20L01EB33078	2001 FORD F250	30,206	30,304	98	23.06	7.4	13.3	04/08/08 09:49 AM	04/10/08 07:47 AM		
2102-3219	1FDNX20L42EA72795	2002 FORD F250	76,729	76,832	103	24.97	8.0	12.9	04/08/08 06:51 AM	04/10/08 04:25 PM		
2104-3205	1FTNF21L44EB51554	2004 FORD F250	21,689	21,723	34	8.97	2.9	11.8	04/08/08 01:39 PM	04/10/08 10:22 AM		
3107-3403	1FDWF36527EB21800	2007 FORD F-350	16,962	17,294	332	88.23	28.3	11.7	04/07/08 08:15 AM	04/10/08 03:51 PM		
3107-3401	1FDWF36547EB21801	2007 FORD F-350	11,032	11,282	250	72.66	23.3	10.7	04/07/08 09:58 AM	04/10/08 03:54 PM		
2300-2851	1GBJC34R8YF479089	2000 CHEVROLET C3500	37,563	37,582	19	5.59	1.8	10.6	04/08/08 10:44 AM	04/10/08 08:15 AM		
3101-2610	1FDAF57S21EC83282	2001 FORD F-550	73,053	73,152	99	30.71	9.8	10.1	04/07/08 04:54 PM	04/10/08 06:31 AM		
3102-3218	1FDWF36L02EA72796	2002 FORD F350	31,683	31,797	114	36.72	11.8	9.7	04/08/08 06:21 AM	04/10/08 06:18 PM	=	
201-2159	1FDWF37S0XEA45854	1999 FORD F350	69,031	69,151	120	49.75	15.9	7.5	04/07/08 07:19 AM	04/10/08 10:21 AM		
3107-2611	1FDAF57Y77EA68963	2007 FORD F-550	6,539	6,551	12	6.10	2.0	6.1	04/07/08 12:26 PM	04/10/08 12:22 PM		

Show 50 🔺 per page. 😡

\_

~

...:

🚰 All Recalls - Microsoft Internet Explorer provided by Polk County BoCC									
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites ]	<u>T</u> ools <u>H</u> elp					<i>.</i>			
🚱 Back 🝷 🕥 🐇 🚺	🗿 🏠 🔎 Search 🦄	🔆 Favorites	🔊 · 🍓 👿 ·	<mark>_</mark> 🖹 🖏					
Address 🙆 http://www.networkca	ar.com/networkcar/ted/filtre	ecalls?recallmakeid=0			💌 🄁 Go 🛛 Lir	nks »			
Google G-	🛩 Go 🚸 🌍 🌄 👻	😭 Bookmarks 🗸 🖞	🎖 Check 👻 🐴 AutoLink 🤸	🔹 📔 AutoFill 🔒 Send to 🗸 🖉	<ul> <li>Setti</li> </ul>	ngs <del>v</del>			
Polk County	Found 32 recalls. Click o	on the ID# for details.		Show page for group: POLK COL View recalls for:	ALL MAKES				
Home									
Fleet Vehicles List	ID# 🚽	Year Make M	odel (	Component					
Fleet Map	01V082000	2001 FORD F250	A	AIR BAGS:FRONTAL					
Fleet Location List	01V227001	2001 FORD F250	5	SEAT BELTS:FRONT:BUCKLE ASSEMBLY					
Fleet Performance Data	01V258000	2001 FORD F250	N	VISIBILITY:WINDSHIELD WIPER/WASHER:MOTOR					
All Alerts	02V068000	1999 FORD F350	F	PARKING BRAKE:CONVENTIONAL:MECHANICAL:LINKAGE AND CABLE					
All Service Records	04V229000	2004 FORD F250	r T	TIRES					
All Recalls	06E043000	2000 CHEVROLE	T C3500 F	FUEL SYSTEM, GASOLINE					
Reports	06E049000	2001 FORD F250	E	XTERIOR LIGHTING					
Administration	06E049000	2004 FORD F250	E	XTERIOR LIGHTING					
Administration	06E049000	2002 FORD F250	E	EXTERIOR LIGHTING					
SEARCH BY	06E052000	2004 FORD F250	E	XTERIOR LIGHTING:HEADLIGHTS					
Vehicle Label 💌	06E052000	2002 FORD F250	E	XTERIOR LIGHTING:HEADLIGHTS					
GO	06E052000	2001 FORD F250	E	EXTERIOR LIGHTING:HEADLIGHTS					
	06V286000	2002 FORD F250	1	/EHICLE SPEED CONTROL					
	06V286000	2002 FORD F350	1	/EHICLE SPEED CONTROL					
CLOSEST VEHICLE TO:	06V286000	1999 FORD F350	1	/EHICLE SPEED CONTROL					
Address 💙 😡	06V286000	1995 FORD F450	1	VEHICLE SPEED CONTROL VEHICLE SPEED CONTROL					
	06\/286000	2001 FORD F250	1						
	07E066000	2001 FORD F250	E	QUIPMENT:ELECTRICAL					
	07E066000	2004 FORD F250	E	QUIPMENT:ELECTRICAL		~			
<b>A</b>									

۲

🥑 Internet

Fleet Vehicles' Diagnostic Performance - Microsoft Internet Explorer provided by Polk County BoCC											
<u>F</u> ile <u>E</u> dit <u>V</u> iew F <u>a</u> vorites	<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp										
🚱 Back 👻 🐑 💌 📘	💈 🏠 🔎 Search 🤸	Favorites 🚱 🔗 🖓	W	• 🧾	🖹 🕅						
Address Address Address	Address 🙆 http://www.networkcar.com/networkcar/ted/filtdiagnostic?SearchText=*										
Google G-	🔽 Go 🚸 🌍 🌄 👻 👔	🕈 Bookmarks 🗸 😽 Check 🗸	🐔 AutoL	ink 🔻 🖇	🖹 AutoFill 🔒	Send to $\bullet$	s	🔘 Se	ttings <del>-</del>		
MANAGEMENT	This list shows how the	13 vehicles in this group are p	erformin	ıg.	Show page	for group:	POLK COUNTY	- FLEET MGMT 🛛 😵			
Polk County	Vehicle Label 🗸	Year Make Model	Stats	MPG	Mileage	Alerts	Location	Last GPS Read			
Home Fleet Vehicles List	201-1985	1995 FORD F450	~		69090	1	۲	04/29/08			
Fleet Map	201-2159	1999 FORD F350	~		69594	0	۲	09:24 AM			
Fleet Location List	2101-3263	2001 FORD F250	~		30556	0		09:18 AM			
Fleet Performance Data	2102-3219	2002 FORD F250	~		77136	0	<b>(</b>	04/29/08			
All Alerts	2104-3205	2004 FORD F250	~		21939	0	<b>(</b>	09:17 AM			
All Service Records	2108-3424	2008 FORD F-250	~		314	0	<b>(</b>	08:44 AM			
All Recalls	2300-2851	2000 CHEVROLET C3500	~		37776	0	۲	08:16 AM			
Reports	3101-2609	2001 FORD F-550	~		67968	0	۲	04/17/08			
Administration	3101-2610	2001 FORD F-550	~		73985	0		06:59 AM			
SEARCH BY	3102-3218	2002 FORD F350	~		32181	0	۲	04/29/08			
Vehicle Label V	3107-2611	2007 FORD F-550	~		6627	0	۲	04/29/08			
Fau	3107-3401	2007 FORD F-350	~	-	11695	1		08:23 AM			
	3107-3403	2007 FORD F-350	~	-	18145	1		09:18 AM			
CLOSEST VEHICLE TO: III		1				1	1	50 💌 per page. 😡			

~

....

🔮 Internet



### Implementation?

Cost Benefit Analysis (hard to pinpoint accurately)
 Potential Impact on Your Policies
 Driver Issues
 Privacy Matters
 Installation \$



### What Will It Cost?

Hardware Cost
 Installation Cost
 Monitoring Costs (Look Out for This One!!)
 Policy & Procedure Implication Costs



## What Will it Save

Fuel – Using MPG and Idle History Maintenance \$ by pinpointing minor issues before they escalate Towing – Some systems offer free towing services for equipped units Emissions Test Costs – Some states (e.g. Calif) exempt equipped vehicles Enhanced Employee Productivity Insurance Rates (?)



### **Other Benefits?**

 Automated Route Tracking (e.g.Refuse) Accurate Odometer Readings More Efficient Routing Perceived as a Green Initiative - Emissions Control Idling Management Tool Enhanced Safety Monitors Speed History Geofencing

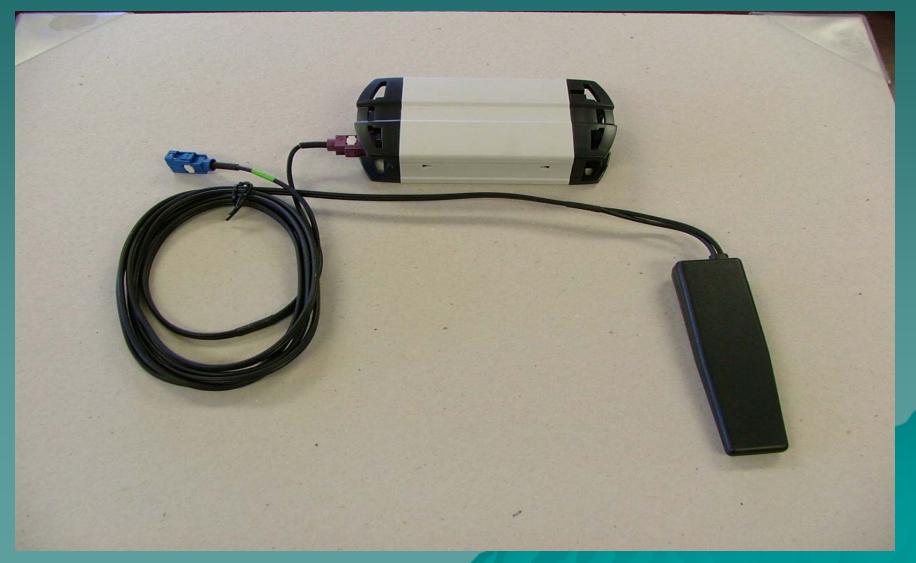
- Vehicle Security & Location Pinpointing
- Accident Reconstruction Aid



## More Application Sources

- http://www.msnbc.msn.com/id/21821936
- <u>http://gpsbus.com/uncategorized/delawar</u> <u>e-gets-smart-too-a-fleet-management-</u> <u>gps-system/</u>
- http://www.rcrnews.com/apps/pbcs.dll/art icle?AID=/20080501/FREE/310879680/10 14
- http://www.siliconrepublic.com/news/new s.nv?storyid=single10856

## Hardware (here's what it looks like?)





### Where Does It Go?





### Antenna?





Installation Cost Considerations

Insource or Outsource? Inventory the Devices? Transfer from Retired to Active **Units?** Cost to Deactivate? Equipment Reliability (references!!) Cost to Update Software/Hardware



## **Monitoring Costs**

### Cell Charges add up!! Look Out!!



## **Policy Implications**

Driver Notification (Y/N)
Driver Discipline
Privacy Matters
Safety Issues
Who Has Access to GPS information

### **GPS ENABLED - MONITORS SPEED & LOCATION**





## **Driver Discipline**

Will you need to amend your policies? Speed Violations (Accidents too) Location Odd Hours ♦ Idling Disabling Equipment (tampering)



### Privacy Issues

### Privacy Issues in Your Jurisdiction??

### **Big Brother??**

### Definite Maybe

GPS/Telematics are tools, treat them as such.





 Accident Investigation Aid
 Excessive Speed
 Geofencing (Heavy Equipment, Generators – Use GPS only?)
 Driver Distraction?



### Access Gateway?

Who's allowed access??

Management?
Front Line Supervision?
Department Only Access?
Other employees?



## Which System is Right?

GPS Only
Telematics Only
Combined GPS/Telematics Solution
On-Star like System Only



## What's Coming Next?

### Expanded Sensor Monitoring -Seat Belt on/off - Speed/Headlights/WSW on/off -OBDII for trucks Technology Convergence -Bluetooth -Two Way Communication - Data Repository - Real Time Routing (available now)



### More of What's Next

As WWW expands, so will this Tech. Intuitive – monitor driver's habits Proactive — Two Way Communication OEM's (Ford, GM) will offer systems Driver Identification Tool More GUI – Internet? Greater Customization for Customers



### What We Covered:

What Should a GPS System Provide What Telematics Can Povide Implementation Considerations Cost Concerns Impact on Your Jurisdiction What's in the Future for this Tech.

### Remember our Troops protecting our right to be here

C.C.

2<sup>nd</sup> Brigade Combat Team 101<sup>st</sup> Airborne Division (Air Assault)





# THANK YOU!!

Bob Stanton Polk County Florida Fleet Management Division (863) 534-5660 BobStanton@polk-county.net