



Navigation, Real-Time Traffic, and Wireless Enhance Automotive Electronics Portfolio

MINNETONKA, MN, September 8, 2005 – With the integration of advanced graphics, voice recognition, and real-time traffic information, portable and OEM navigation devices are becoming more powerful and useful in everyday travel.

Added functionality — such as 3D building and topography views – is contributing to the rapid adoption of navigation technology. By the end of the decade, portable and OEM-installed navigation shipments in the U.S. will exceed 16 million units annually according to Telematics Research Group (TRG).

Only a handful of navigation devices support real-time traffic data, but those that do provide a critical added value. “The availability of real-time traffic information increases the value of navigation because the route can be modified based on traffic conditions,” says Dr. Egil Juliussen, principal technology analyst with TRG.

TRG estimates OEM navigation attach rates at only 5% of new car sales in the U.S. “But the market is about to change,” says Phil Magney, TRG’s co-founder and principal market analyst. “Low-cost portable navigation devices and smart wireless devices are seeding the market for all navigation devices,” he says quoting a new TRG report.

According to TRG’s OEM Database, nearly 150 automotive models (representing 35 brands) offer navigation as standard or optional equipment. TRG’s Aftermarket Product Database lists 92 portable navigation devices representing 47 brands.

North American Navigation Market	Number of Brands Available	Number of Models Available	2005 Market Estimate USA – units	2010 Market Estimate USA - units
OEM Navigation Systems	35 Brands*	135 Models*	1.17(m)	3.71(m)
OEM Monitored Telematics	15 Brands*	68 Models*	2.03(m)	6.68(m)
Rear Seat Entertainment	28 Brands*	69 Models*	2.20(m)	4.20(m)
OEM Bluetooth Interfaces (embedded)	17 Brands*	47 Models*	.49(m)	6.05(m)
Portable Devices w/Navigation	47 Brands**	92 Models**	1.45(m)	12.86(m)
	* TRG OEM Database ** TRG Product Database		TRG Navigation Forecast Report	

TRG cites Acura’s real-time traffic solution as an example of the latest OEM technology. The Acura system includes incidents and freeway flow speeds and displays it on the navigation system map. It responds to voice commands – e.g., “display traffic incidents” – and a list of all events in the surrounding neighborhood are displayed on the screen. Similarly, the Cadillac CTS, when equipped with an optional DVD navigation system, supports real-time traffic as well.

The 2006 Lexus RX400h has another example of high-end navigation, featuring voice recognition and a new touch-screen system that shows buildings in 3D. And starting next year, Lexus will re-introduce a monitored telematics solution called the Personal Concierge Plan that

supports emergency calling, driving directions, stolen-vehicle tracking, and roadside assistance.

“Our text-to-speech system is quite good -- very user-friendly and intuitive,” says Michelle Avary, manager of Lexus Link. “We recognize that our customers are diverse. To that end, we now have Spanish-language prompts available on our voice-recognition system. Soon, we’ll add other languages, too.”

Meanwhile, OnStar, the automotive industry heavyweight in terms of telematics solutions, handles navigation through a live operator rather than a map displayed on the dashboard. “We handle 50,000 to 70,000 interactions daily.” says Jim Kobus, OnStar’s communications manager. OnStar says they fielded 383,608 routing requests from subscribers last month.

How does Microsoft see the future of navigation technologies? “We’re seeing a couple things happening,” says Peter Wengert, global director of sales & marketing for Microsoft’s Automotive Business Unit.

“Shared-drive, in-car technology that will allow you to store maps of your favorite routes and digital music. And more sophisticated graphic displays of real-time traffic and construction info will be out late this fall or early next spring.”

When it comes to portable navigation devices, what do buyers at retail stores want? Mike Manske, merchant team leader at Best Buy Mobile Electronics, says, “Real-time traffic & navigation.” For commuters and business travelers? “Yes, they’re buying it.” Manske states, “The really big play, though, is women -- the so-called ‘soccer moms’ -- who go

nonstop all day and want safety, security, and efficiency while they drive from home to school, games, practices, lessons, meetings, etc.”

About TRG:

TRG (Telematics Research Group, Inc.) tracks and analyzes the automotive telematics, wireless, and entertainment sectors. TRG conducts a global telematics survey profiling the systems used in hundreds of production light vehicles and licenses this intelligence for competitive and market analysis.

TRG was established in 2001 and expanded its operation in January 2004 with the formation of TRG Europe, GmbH (Sindelfingen, Germany).

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