OnStar Today

- Nearly 6 million active subscribers
- Built into 95% of GM retail vehicles in the United States and Canada
- Twelve years of experience and innovation
  - Launched 8 generations of vehicle hardware
  - Over 400 patent filings, now 1 every 6 days
  - 200 million customer interactions to date
- Now touching customers every second of every day
Location-Based Service Interactions

- Automatic Crash Response: 2,000/Month
- Emergency Services: 10,000/Month
- Good Samaritan: 5,000/Month
- Stolen Vehicle Assistance: 700/Month
- Remote Unlock: 63,000/Month
- Roadside Assistance: 29,000/Month
- Turn-by-Turn Routes Delivered: 1,000,000/Month
- OnStar Vehicle Diagnostics: Over 3.4 Million Emails Sent
- Remote Diagnostics (on demand): 53,000/Month
- OnStar Hands-Free Calling: Over 30 Million Minutes/Month
- One Very Hardworking Button: Over 200 Million Cumulative Service Interactions

Monthly average (August – October 2008)
Monthly Subscriber Interactions

Automatic Crash Response 2,000/Month

OnStar Hands-Free Calling Over 30 Million Minutes/Month

One Very Hardworking Button Over 200 Million Cumulative Service Interactions

Monthly average (August – October 2008)
Automatic Crash Response 100,000 Incidents
OnStar’s Automatic Crash Response Evolution

1996
- Airbag Deployment Notification
- 3rd Party PSAP Boundary Database
- Cleared Numbers for Emergency Calls

1998
- Dedicated Emergency Advisors

1997
- APCO/NENA Connection

1999
- OnStar Public Safety Training Program
- 3-Button Assembly

2000
- Canada Launch

2001
- Roof-mount Antenna

2002
- Migrated to Proprietary PSAP Boundary Database
- 12-Channel GPS

2003
- AACN
- Native Language Call Routing

2004
- APCO Training Certification
- CARS Data Feed to 20 States

2005
- Command Center Launch
- ABS Dead Reckoning

2006
- TTY
- Situational Awareness

2007
- E911 Phase 1
- CDC Study

2008
- Dedicated ACR Advisors

2009
- Gyro-based GPS Location
- E911 Phase 2

2009 and Beyond

Continuous Improvements
- Data: 911 PSAP Boundaries/Hospitals/Map Data
- Advisor Training
- Voice Recognition
- Advisor Applications/Tools
- IT Failover/Redundancy
Pre-OnStar Crash Signature Technology
Digital Crash Signature

The world’s most advanced crash notification system

Automatic Crash Response Status

<table>
<thead>
<tr>
<th>Air Bag Status</th>
<th>Left Side Deployed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Reported Delta V</td>
<td>32 mph/51 km/h from the Left Side</td>
</tr>
<tr>
<td>Direction of Impact</td>
<td>Left Side</td>
</tr>
<tr>
<td>Multiple Impacts</td>
<td>No</td>
</tr>
<tr>
<td>Rollover Status</td>
<td>No</td>
</tr>
</tbody>
</table>

Seattle, WA

<table>
<thead>
<tr>
<th>Time</th>
<th>Longitude</th>
<th>Latitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>4:07 PM</td>
<td>122°19'2W</td>
<td>47°36'41N</td>
</tr>
</tbody>
</table>

PSAP Location

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seattle PD</td>
<td>Primary Emergency No. (206) 583-2111</td>
<td></td>
</tr>
</tbody>
</table>

Seattle PD PSAP Primary Emergency No. is (206) 583-2111 and Secondary Emergency No. is not available. This value is plotted from the latitude 47°41'14" and the longitude -122.3172.
Monthly Subscriber Interactions

Stolen Vehicle Assistance
700/Month

Automatic Crash Response
3,000/Month

Emergency Services
10,000/Month

Good Samaritan
5,000/Month

Remote Diagnostics
(on demand)
53,000/Month

Remote Unlock
63,000/Month

Remote Diagnostics
5,000/Month

Emergency Services
10,000/Month

Roadside Assistance
29,000/Month

Remote Diagnostics
(on demand)
53,000/Month

Remote Unlock
63,000/Month

Automatic Crash Response
2,000/Month

Stolen Vehicle Assistance
700/Month

Turn-by-Turn Routes Delivered
1,000,000/Month

OnStar Hands-Free Calling
Over 30 Million Minutes/Month

One Very Hardworking Button
Over 200 Million Cumulative Service Interactions

Monthly average (August – October 2008)
**Stolen Vehicle Slowdown**

**The Facts**

Over 1 million stolen vehicles annually in the U.S.

30,000 high speed chases

25% result in injuries – many times innocent bystanders

300 people die

**GM’s Response**

Remove the horsepower from the felon

Deployed on over 1.0 million MY 2009 vehicles
Monthly Subscriber Interactions

Turn-by-Turn Routes Delivered 1,000,000/Month

Automatic Crash Response 1,000/Month
Emergency Services 10,000/Month
Good Samaritan 5,000/Month
Emergency Services 10,000/Month
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Remote Unlock 63,000/Month
Automatic Crash Response 2,000/Month
Stolen Vehicle Assistance 700/Month
Turn-by-Turn Routes Delivered 1,000,000/Month
OnStar Hands-Free Calling Over 30 Million Minutes/Month
One Very Hardworking Button Over 200 Million Cumulative Service Interactions
Monthly average (August – October 2008)
Redefines factory enabled navigation expectations:

- Simplest/smarterest approach
- Available across all vehicle segments
- Establishes new category of “Connected Navigation”
- Creates multiple value capture opportunities
- Vehicle Differentiation
Automobile Services

Science and Innovative GNSS Applications

International Committee on Global Navigation Satellite Systems (ICG)

9 December, 2008

Timothy R. Nixon
Director, Advanced Systems Development
OnStar

www.onstar.com
<table>
<thead>
<tr>
<th>Service</th>
<th>Monthly Volume</th>
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<td>Automatic Crash Response</td>
<td>2,000/Month</td>
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<td>Emergency Services</td>
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Monthly average (August – October 2008)
OnStar by GM

100,000

Automatic Crash Responses
Getting Help in a Crash

- Originally conceived of as the foundation of OnStar – our reason for being
Getting Help in a Crash

- Originally conceived of as the foundation of OnStar – our reason for being
- Has set the standard for everything we do
Getting Help in a Crash

- Originally conceived of as the foundation of OnStar – our reason for being
- Has set the standard for everything we do
- There were no templates or roadmaps – only a compelling need to act
Getting Help in a Crash

- Originally conceived of as the foundation of OnStar – our reason for being
- Has set the standard for everything we do
- There were no templates or roadmaps – only a compelling need to act
- Understood that it was the beginning of a difficult but potentially life changing journey
  - Countless risks and unknowns
  - Amazing opportunity to innovate with purpose