Report to Congress

Eighth Annual
CMRS Competition Report

June 26, 2003
Wireless Telecommunications Bureau

Total US Commercial Wireless Subscribers

Millions of Subscribers

Mobile Telephone Competition

<table>
<thead>
<tr>
<th>Number of Competitors in a County</th>
<th>1995</th>
<th>1997</th>
<th>2001</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 or more</td>
<td>2.5%</td>
<td>78%</td>
<td>91%</td>
<td>95%</td>
</tr>
<tr>
<td>4 or more</td>
<td>66%</td>
<td>84%</td>
<td>89%</td>
<td>75%</td>
</tr>
<tr>
<td>5 or more</td>
<td>9%</td>
<td>83%</td>
<td>47%</td>
<td>71%</td>
</tr>
<tr>
<td>6 or more</td>
<td></td>
<td></td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td>7 or more</td>
<td></td>
<td></td>
<td></td>
<td>25%</td>
</tr>
</tbody>
</table>

Source: Federal Communications Commission
Average Minutes-of-Use per Month

Average Revenue Per Minute for Mobile Telephone Service

Source: Calculated using Average Local Monthly Bill and Average Minutes of User per Subscriber per Month from Cellular Telecommunications & Internet Association, 2003.
Annual Wireless Capital Investment
1992-2002

Next Generation Network Rollout

Next Generation Network Rollout in the United States Estimated by County

Source: Federal Communications Commission
Mobile Data Services

- 11.9 million mobile telephone users subscriber to mobile Internet subscribers at the end of 2002
- 2.3 million users of data-only mobile devices at the end of 2002
- Mobile data services:
  - Paging
  - Text messaging
  - Ring tones
  - Games
  - Multimedia messaging
  - Web browsing
  - E-mail access
  - Corporate server access
- 20% of all mobile telephone subscribers used text messaging services during 4Q02

Sources: Morgan Stanley, Telephia/Harris Interactive.
Urban vs. Rural Comparisons: Coverage

- RSA vs. MSA Counties
- EA Non-Nodal vs. Nodal Counties
- Counties with Pop Density Under 100 vs. Pop Density Over 100

Average Number of Competitors per County

- Proxy for Rural Area
- Proxy for Non-Rural Area

- RSA vs. MSA Counties: 3.3 vs. 5.7
- EA Non-Nodal vs. Nodal Counties: 3.2 vs. 5.7
- Counties with Pop Density Under 100 vs. Pop Density Over 100: 3.3 vs. 5.6
Wireless now accounts for 30 percent of total telecommunications sector revenues and has displaced 30 percent of total wireline minutes.

For the average household, wireless represents 27 percent of total telecommunications expenditures.

The long distance, local and payphone segments of the telecommunications industry have all been losing business to wireless substitution:

"Why use a pay phone, a calling card, or a hotel phone when prices are generally higher on a per-minute basis relative to wireless? Also, given that a large number of night and weekend minutes are now regularly included in wireless pricing schemes . . ., it is often cheaper to use your wireless phone while in your home." --UBS Warburg

Sources: Lehman Bros., CIBC World Markets, UBS Warburg
Wireless Telecommunications Bureau

Major Metropolitan Areas with the Highest Penetration Rates

- Boston 63%
- St. Louis 69%
- Greenville 71%
- Atlanta 64%
- Raleigh 65%
- Orlando 65%
- Washington 64%

Sources: Telephia
Estimated U.S. Penetration by Age Group