Digital Divide

- Gap in computer and Internet use across various social groups
- Who is included and who is excluded and what are the consequences?
- How stable over time?
- What should be done about it?
Major Documents/Books/Reports

- **Falling Through the Net** (1998)
- Pippa Norris, *Digital Divide* (2001)
Barriers to Access: Jan Van Dijk and Joseph Hacker

- Lack of elementary digital experience caused by lack of interest, computer anxiety, and unattractiveness of new technology (mental access)
- Lack of material access
- Lack of digital skills (skills access)
- Lack of significant usage opportunities (usage access)
Individual-Level Barriers to Access

• Language
• Basic Literacy
• Electronic literacy
Income and Race in the US
Key Variables

- Economic Development
- Availability of telephones, computers
- Competition in telecom markets
- Human capital formation
- Type of regime (authoritarian vs. democratic)
Map of Global Digital Divide
Internet Users in the World by Geographic Regions

- Asia: 704.2 millions
- Europe: 402.4 millions
- North America: 251.7 millions
- Latin America / Caribbean: 175.8 millions
- Africa: 65.9 millions
- Middle East: 48.0 millions
- Oceania / Australia: 20.8 millions

Source: Internet World Stats - www.internetworldstats.com/stats.htm
Estimated Internet users are 1,668,870,408 for June 30, 2009
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<table>
<thead>
<tr>
<th>Region</th>
<th>Computer Use (per 100 people)</th>
<th>Internet Use (per 100 people)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developing Countries</td>
<td>2.5</td>
<td>2.6</td>
</tr>
<tr>
<td>Least Developed Countries</td>
<td>0.3</td>
<td>0.2</td>
</tr>
<tr>
<td>Arab States</td>
<td>2.1</td>
<td>1.6</td>
</tr>
<tr>
<td>East Asia and the Pacific</td>
<td>3.3</td>
<td>4.1</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>5.9</td>
<td>4.9</td>
</tr>
<tr>
<td>South Asia</td>
<td>0.8</td>
<td>0.6</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>1.2</td>
<td>0.8</td>
</tr>
<tr>
<td>Central &amp; Eastern Europe &amp; CIS</td>
<td>5.5</td>
<td>4.3</td>
</tr>
<tr>
<td>OECD</td>
<td>36.3</td>
<td>33.2</td>
</tr>
<tr>
<td>High-income OECD</td>
<td>43.7</td>
<td>40</td>
</tr>
</tbody>
</table>

Telephone Lines

Fixed telephone lines per 100 inhabitants

The digital divide in 1994: 11 times more

The digital divide in 2004: 4 times more

Source: International Telecommunication Union
Mobile Telephones

Source: International Telecommunication Union
Internet Users

The digital divide in 1994:

- Developed: 0.03
- World: 0.06
- Developing: 0.1

The digital divide in 2004:

- Developed: 53.8
- World: 13.8
- Developing: 6.7

73 times more
8 times more

Source: International Telecommunication Union
Broadband vs. Dial-Up

- Broadband accentuates the digital divide
- Average monthly cost $40-45 is too high for many poor families
- Higher speeds translate into higher costs generally
- Dial-up users limited in ability to create new content (vs. passive use of existing content)
Broadband/Dialup Gaps

Figure 1 — Internet subscribers by region and access type, 2006

Percentage of Internet subscribers that are broadband subscribers

- Asia-Pacific: 57.5%
- Europe: 72.4%
- Americas: 80.7%
- Africa: 10%

Internet subscribers • Broadband subscribers • DSL subscribers
Regional Broadband Speeds

Broadband regional comparisons

UK regional download speeds (kbps)

<table>
<thead>
<tr>
<th>Region</th>
<th>Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>London</td>
<td>4,460</td>
</tr>
<tr>
<td>North-east</td>
<td>3,594</td>
</tr>
<tr>
<td>North-west</td>
<td>3,393</td>
</tr>
<tr>
<td>East Midlands</td>
<td>3,275</td>
</tr>
<tr>
<td>South-east</td>
<td>3,253</td>
</tr>
<tr>
<td>Yorkshire</td>
<td>3,204</td>
</tr>
<tr>
<td>West Midlands</td>
<td>3,193</td>
</tr>
<tr>
<td>East</td>
<td>3,090</td>
</tr>
<tr>
<td>Scotland</td>
<td>2,876</td>
</tr>
<tr>
<td>South-west</td>
<td>2,869</td>
</tr>
<tr>
<td>Wales</td>
<td>2,587</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>2,258</td>
</tr>
</tbody>
</table>

Source: thinkbroadband.com based on more than 138,000 speed-tests representing 6,000 unique postcodes
The country needs to know where high-speed Internet service is available and where it isn't. And that is just the first step. Next, consumers need to know the extent of broadband competition in their local area. They need to know the names of the carriers that offer broadband, the speeds they offer, and the prices they charge. BroadbandCensus.com intends to fill this gap.