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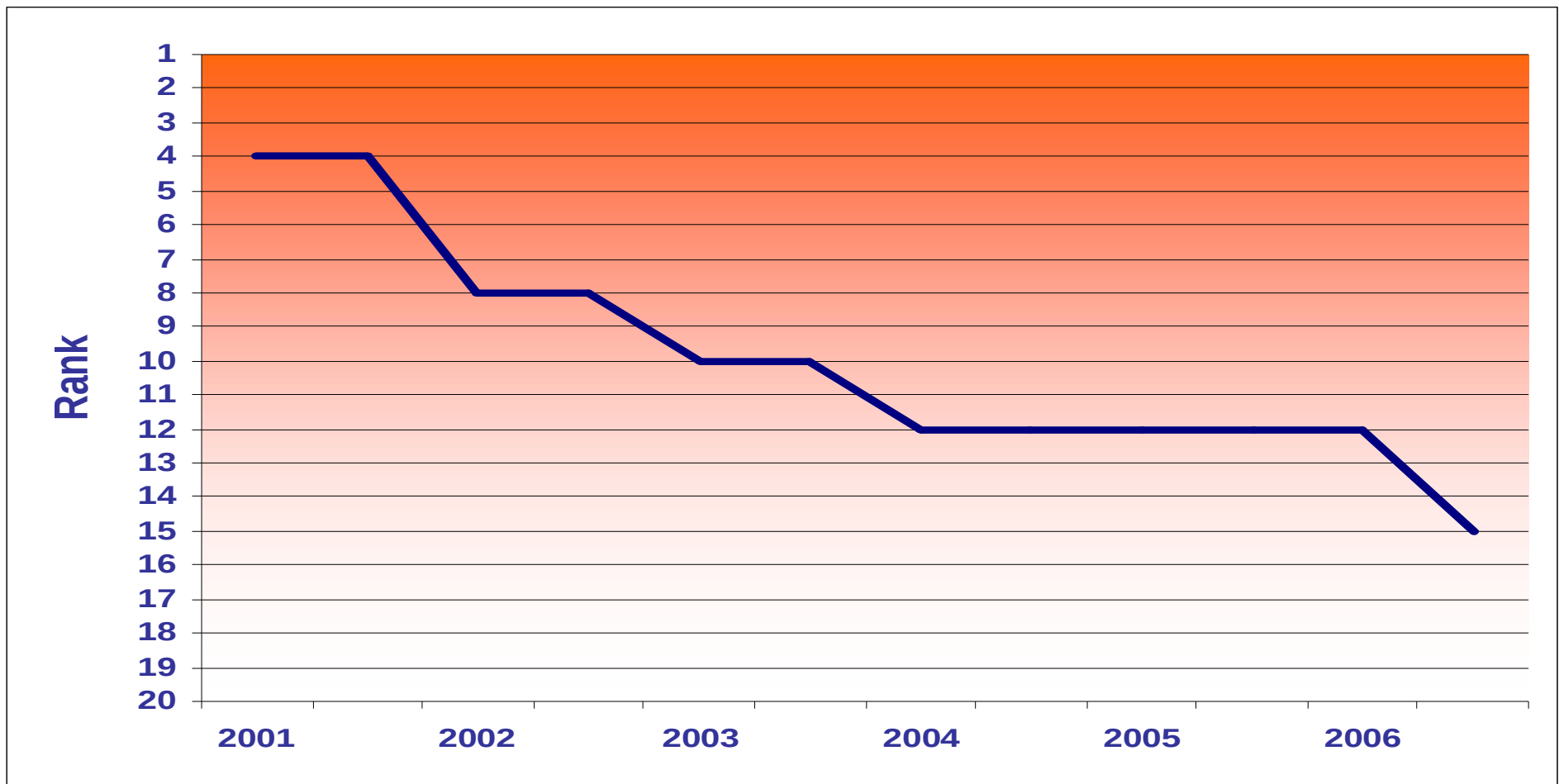
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# The Case for a National Broadband Policy

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# U.S. Ranking Among OECD Countries in Broadband Penetration

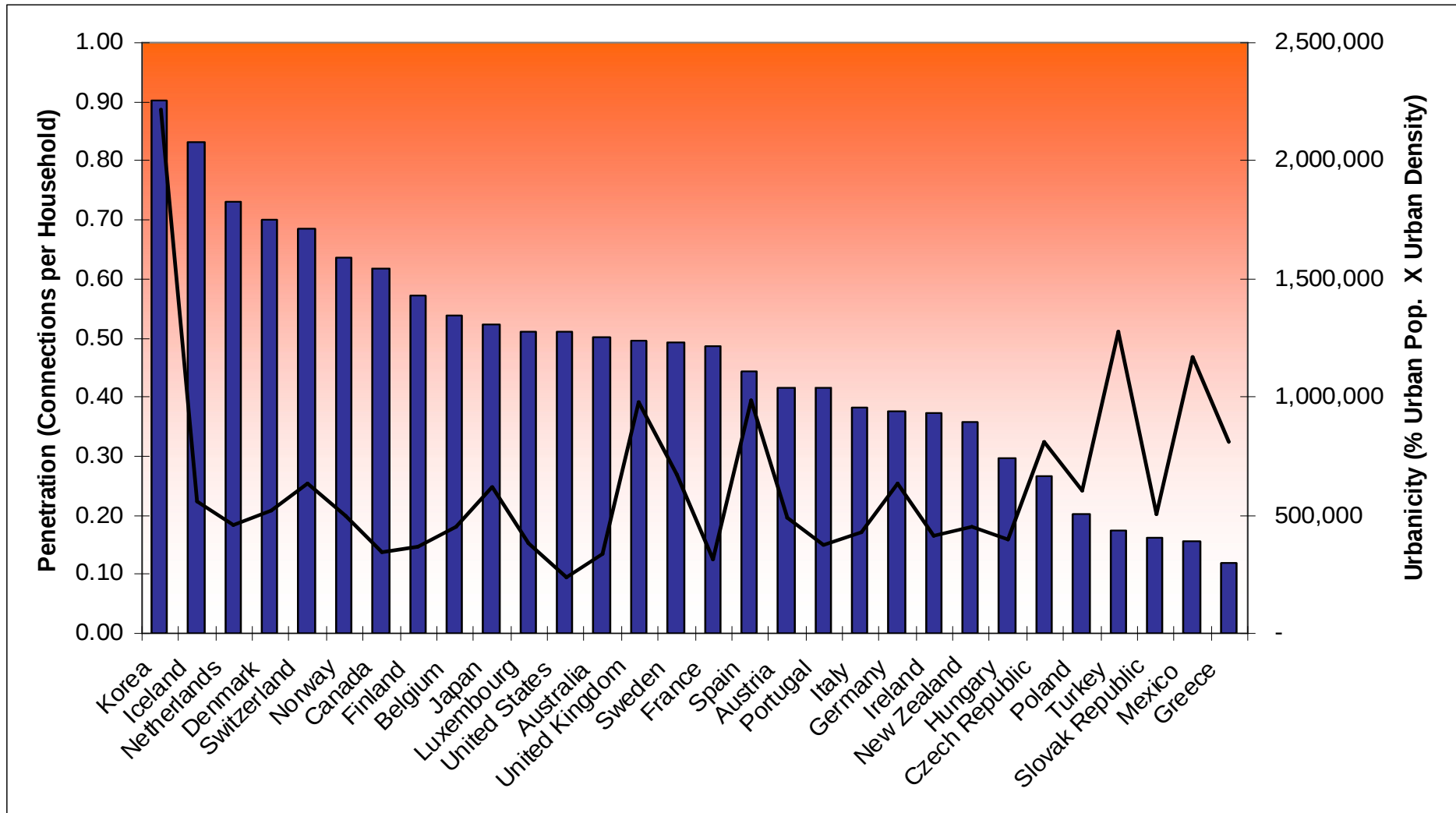


Source: OECD Directorate for Science, Technology, and Industry, "Broadband Statistics to December 2006," (April 2007).

# Leading Complaints/Excuses

- OECD excludes students and workers who get broadband for free.
- U.S. leads world in broadband subscribers.
- U.S. ranks more favorably on Internet users.
- U.S. is less urban.
- Per-capita is the wrong measure.

# Penetration vs. “Urbanicity”



Sources: OECD Directorate for Science, Technology, and Industry; United Nations, Population Division; Demographia and ITIF calculations.

# Penetration: Per Household vs. Per Capita

| Nation         | Per Household | Per Capita |
|----------------|---------------|------------|
| Australia      | 13            | 16         |
| Austria        | 18            | 17         |
| Belgium        | 9             | 10         |
| Canada         | 7             | 9          |
| Czech Republic | 25            | 25         |
| Denmark        | 4             | 1          |
| Finland        | 8             | 7          |
| France         | 16            | 13         |
| Germany        | 21            | 18         |
| Greece         | 30            | 28         |
| Hungary        | 24            | 24         |
| Iceland        | 2             | 3          |
| Ireland        | 22            | 23         |
| Italy          | 20            | 20         |
| Japan          | 10            | 14         |

| Nation          | Per Household | Per Capita |
|-----------------|---------------|------------|
| Korea           | 1             | 4          |
| Luxembourg      | 11            | 12         |
| Mexico          | 29            | 30         |
| Netherlands     | 3             | 2          |
| New Zealand     | 23            | 21         |
| Norway          | 6             | 6          |
| Poland          | 26            | 26         |
| Portugal        | 19            | 22         |
| Slovak Republic | 28            | 27         |
| Spain           | 17            | 19         |
| Sweden          | 15            | 8          |
| Switzerland     | 5             | 5          |
| Turkey          | 27            | 29         |
| U.K.            | 14            | 11         |
| United States   | 12            | 15         |

Sources: OECD Directorate for Science, Technology, and Industry and ITIF calculations.

# ITIF Broadband Rankings

| Rank    | Nation          | Penetration               | Speed                | Price                                                      | Overall Score |
|---------|-----------------|---------------------------|----------------------|------------------------------------------------------------|---------------|
|         |                 | Subscribers per Household | Average Speed (mbps) | Price per Month for 1 mbps of Fastest Technology (USD PPP) |               |
| 1       | Korea           | 0.90                      | 45.6                 | 0.45                                                       | 15.73         |
| 2       | Japan           | 0.52                      | 61.0                 | 0.27                                                       | 14.99         |
| 3       | Iceland         | 0.83                      | 6.0                  | 4.99                                                       | 12.14         |
| 4       | Finland         | 0.57                      | 21.7                 | 2.77                                                       | 12.11         |
| 5       | Netherlands     | 0.73                      | 8.8                  | 4.31                                                       | 11.87         |
| 6       | Sweden          | 0.49                      | 18.2                 | 0.63                                                       | 11.54         |
| 7       | France          | 0.49                      | 17.6                 | 1.64                                                       | 11.41         |
| 8       | Denmark         | 0.70                      | 4.6                  | 4.92                                                       | 11.37         |
| 9       | Norway          | 0.64                      | 7.4                  | 4.04                                                       | 11.29         |
| 10      | Canada          | 0.62                      | 7.6                  | 6.50                                                       | 11.11         |
| 11      | Belgium         | 0.54                      | 6.2                  | 6.69                                                       | 10.60         |
| 12      | United States   | 0.51                      | 4.8                  | 3.33                                                       | 10.47         |
| 13      | Switzerland     | 0.68                      | 2.3                  | 21.71                                                      | 10.40         |
| 14      | Australia       | 0.50                      | 1.7                  | 2.39                                                       | 10.23         |
| 15      | Austria         | 0.42                      | 7.3                  | 5.99                                                       | 10.08         |
| 16      | Portugal        | 0.42                      | 8.1                  | 10.99                                                      | 9.92          |
| 17      | United Kingdom  | 0.50                      | 2.6                  | 11.02                                                      | 9.92          |
| 18      | Germany         | 0.38                      | 6.0                  | 5.20                                                       | 9.81          |
| 19      | Italy           | 0.38                      | 4.2                  | 3.36                                                       | 9.78          |
| 20      | Luxembourg      | 0.51                      | 3.1                  | 18.48                                                      | 9.71          |
| 21      | Spain           | 0.44                      | 1.2                  | 12.46                                                      | 9.48          |
| 22      | New Zealand     | 0.36                      | 2.3                  | 9.20                                                       | 9.26          |
| 23      | Ireland         | 0.37                      | 2.2                  | 13.82                                                      | 9.14          |
| 24      | Poland          | 0.20                      | 7.5                  | 13.00                                                      | 8.69          |
| 25      | Czech Republic  | 0.27                      | 1.6                  | 24.10                                                      | 8.11          |
| 26      | Hungary         | 0.30                      | 3.0                  | 44.24                                                      | 7.53          |
| 27      | Greece          | 0.12                      | 1.0                  | 33.19                                                      | 6.93          |
| 28      | Slovak Republic | 0.16                      | 2.8                  | 50.15                                                      | 6.58          |
| 29      | Mexico          | 0.16                      | 1.1                  | 60.01                                                      | 6.00          |
| 30      | Turkey          | 0.17                      | 2.0                  | 115.76                                                     | 3.81          |
| Average |                 | 0.46                      | 9.0                  | 16.52                                                      | 10.00         |

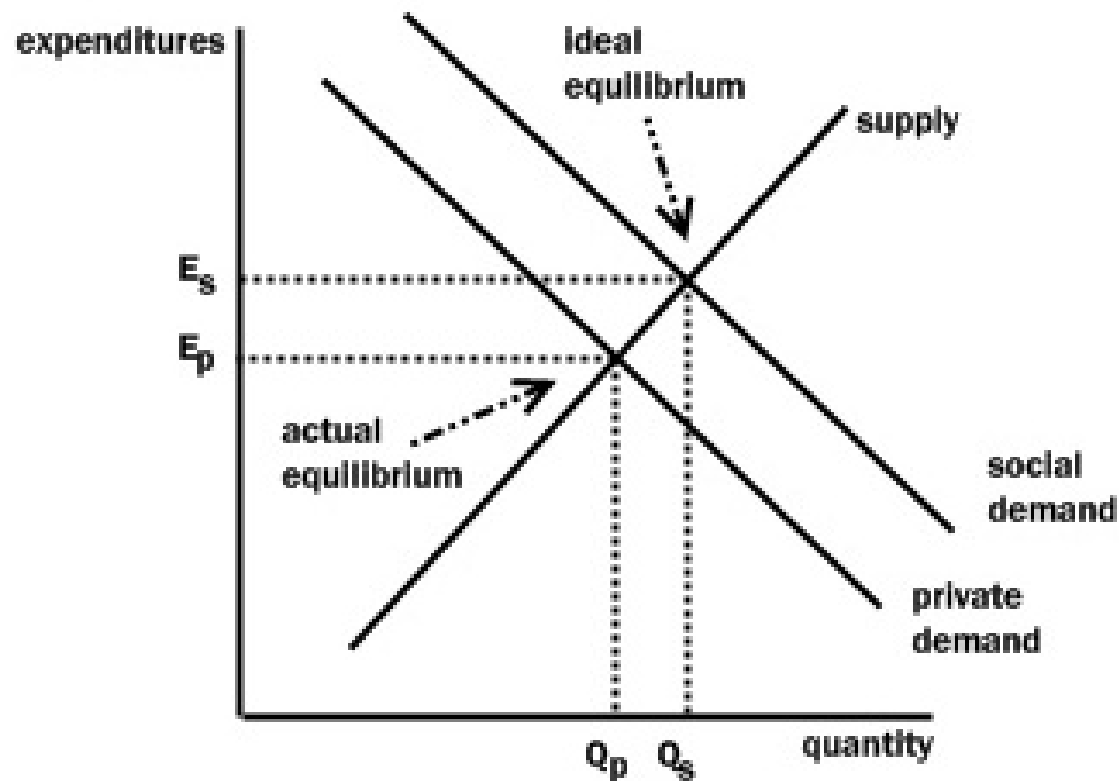
Sources: OECD Directorate for Science, Technology, and Industry and ITIF calculations.

# Broadband Externalities:



Broadband is not an iPod

# Supply and Demand for Broadband with Positive Externalities



# Broadband Externalities

- 1) network externalities
- 2) “prosumer” investment externalities
- 3) competitiveness externalities
- 4) regional externalities

# BB Policy Recommendation Matrix

## Proactive

## Removal of Barriers

### Demand Side

- More public content (e.g., PBS, digital lending library)
- Incentives for Telework, telemedicine, and e-learning;
- E-government
- Digital literacy programs
- USF for BB

- Web radio royalty fees
- Telework tax clarification
- Internet tax moratorium

### Supply Side

- Tax incentives
- Next generation network R&D
- Rural BB funding
- State BB programs

- More spectrum for data
- Broadband mapping
- Removal of Regulatory Barriers



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