

A large, stylized graphic of fiber optic cables dominates the left and center of the page. The cables are represented by numerous thin, parallel lines that curve from the top right towards the bottom left. The lines are colored in a gradient from blue to purple. At the bottom left, the ends of the cables are shown as a dense cluster of small, glowing white and blue dots.

The Economic Value of the Advertising-Supported Internet Ecosystem

A report for the Interactive Advertising Bureau conducted by Hamilton Consultants under the direction of Professors John Deighton and John Quelch of the Harvard Business School.

June 2009.

Origins of the Project

March 2008: Interactive Advertising Bureau requested proposals for a research study to analyze the contribution of the advertising-supported Internet to the US economy: scope, employment, the firms that make up the Internet, and value of its economic activity.

April 2008: Hamilton Consultants, retained and directed by Professors John Quelch and John Deighton of the Harvard Business School, were commissioned to undertake the assignment.

The Project

Our approach was to value the Internet by what we pay for it.

But before we adopt the economist's mindset, we should reflect on how much more the Internet is than an economic transaction: Some things are worth much more than we pay for them.

In just 14 years, the Internet has wrought a social revolution

In 19% of marriages today, bride and groom met online.

As much time is spent on the Internet - 68 hours a month – as is spent in front of the television.

Ten percent of non-food retailing now happens online.

The internet brings down the barrier to starting a small business. Over a million people run one-person firms online - 120,000 sell full time on eBay, 500,000 do so part time, and 500,000 earn advertising revenues from blogs.

For those with regular jobs, the internet has brought a new fluidity to the notion of “the office.” We can work at home or out of the office when life circumstances require it.

How did we calculate what we pay for the Internet?

We used three methods to triangulate on the answer:

1. **Employment:** How much is paid to workers to run the Internet?
2. **Sector GDP:** How much is paid from the mainstream economy to the Internet sector for Internet services?
3. **Attention:** How much time do consumers give to the Internet?

The three methods gave us three answers.

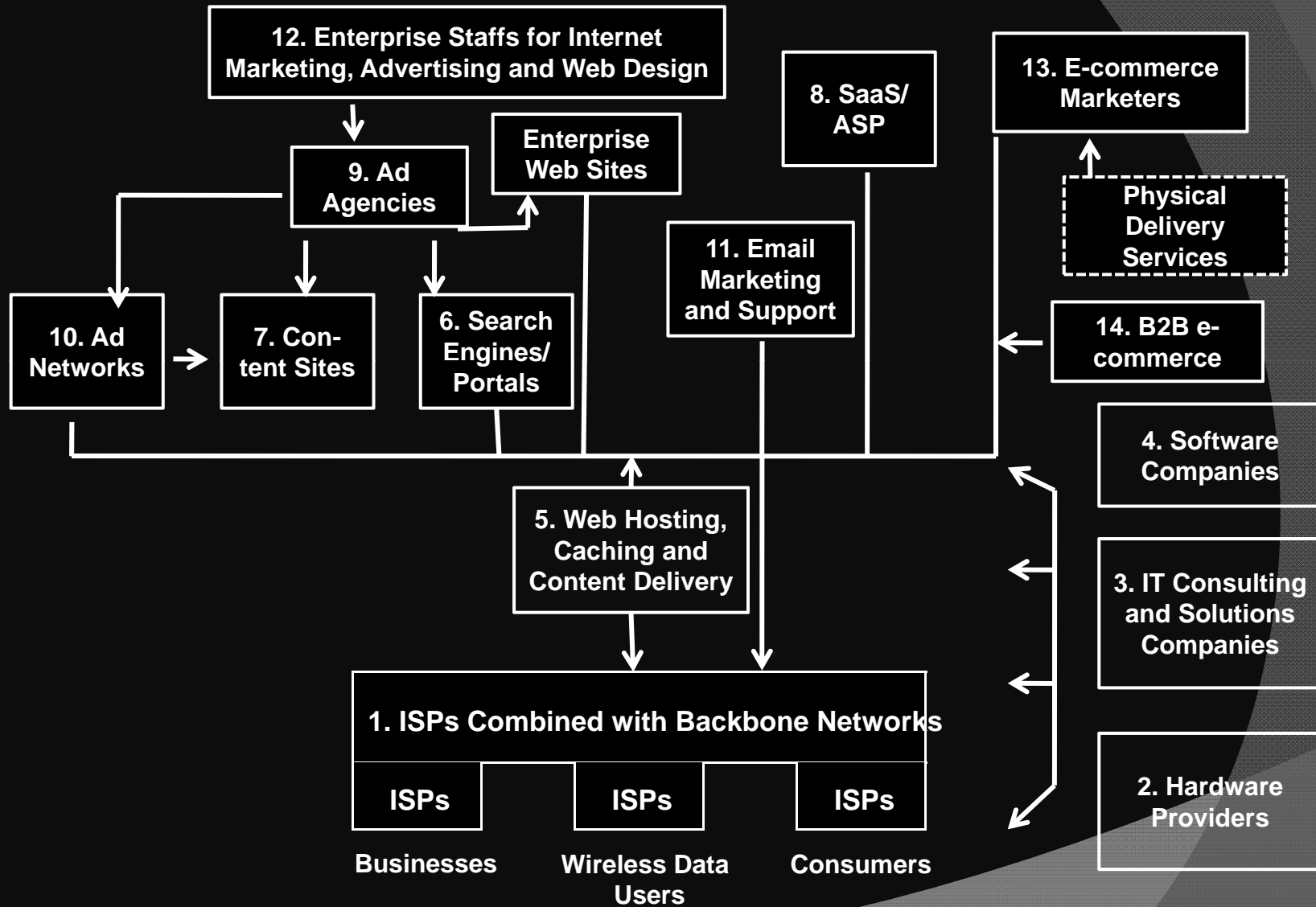
1. **Employment method: \$300 billion**
2. **Sector GDP method: \$444 billion**
3. **Attention method: \$680 billion**

Our conclusion, conservatively, is that the internet represents at least 2.1% of U.S. gross domestic product.

How much employment does the Internet generate?

One of the core elements of our report is a firm-by-firm enumeration of Internet-related employment.

The Internet Ecosystem



How much employment does the Internet generate?

We find about 1.2 million people owe their jobs directly to the Internet. Another 1.9 million work to support the direct jobs.

In total, therefore, about 3.1 million people owe their livelihoods to the Internet.

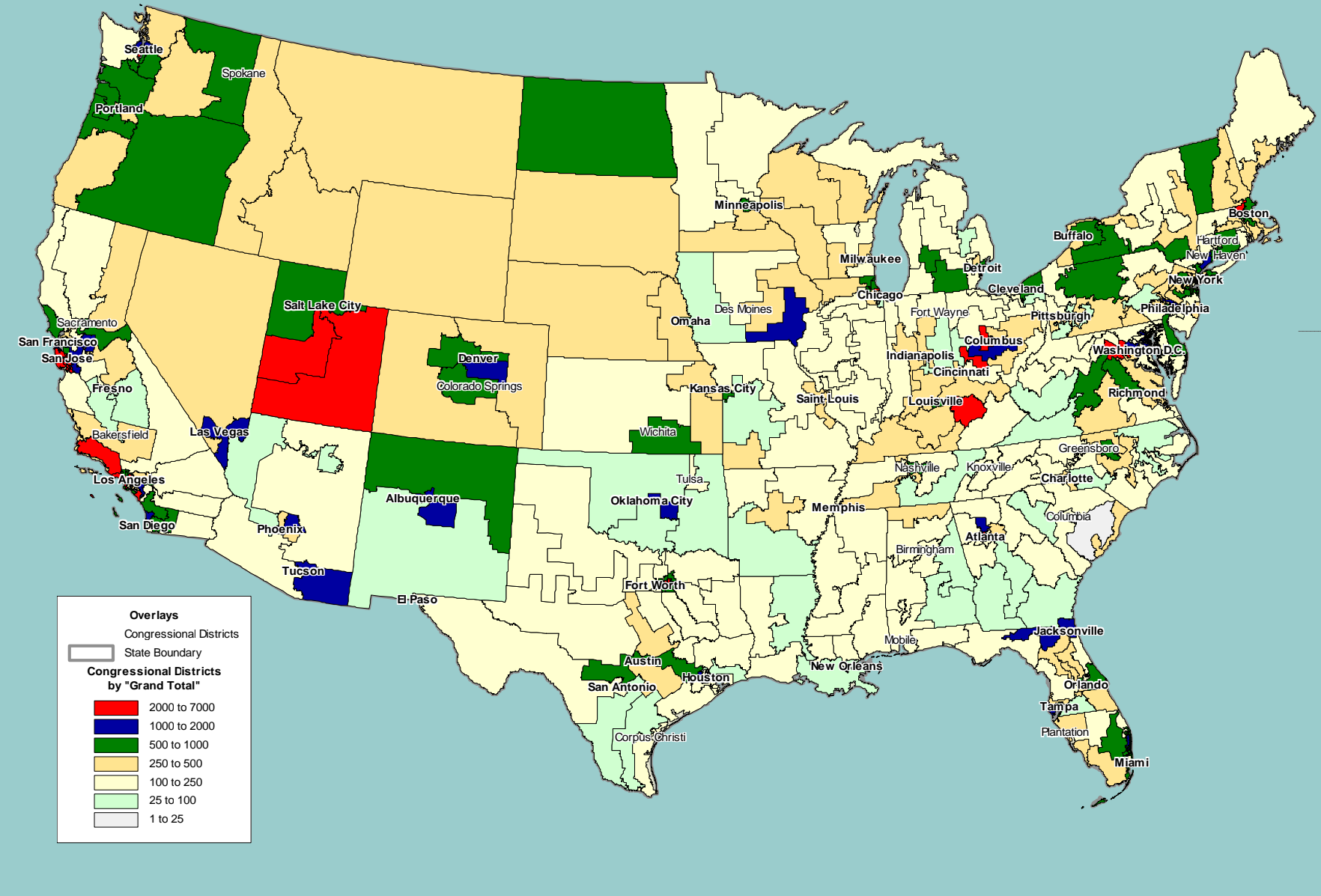
At least 10% work in firms with under 10 employees.

They live in all of the 435 U.S. Congressional Districts.

The Internet Ecosystem's Segments

Company	2007 Internet Revs. (\$billions)	2007 U.S. Internet Employees
1. Internet service providers (ISPs) and transport	73.31	181,233
2. Hardware providers	64.41	65,591
3. IT consulting and solutions companies	8.15	32,155
4. Software companies	15.72	27,192
5. Web hosting and content management	5.85	52,835
6. Search engines/portals	33.84	48,925
7. Content sites	6.0	59,901
8. Software as a Service (SaaS)	7.70	31,487
9. Ad agencies and support services	10.64	29,407
10: Ad networks	1.19	1,533
11. E-mail marketing and support	1.02	10,278
12. Enterprise staffs and subcontractors doing Internet advertising, marketing and web design	15.00	100,000
13. E-commerce, including physical delivery	202.78	508,391
14. B2B e-commerce	1,350.00	44,233
Total		1,193,000

There is Internet employment in every congressional district



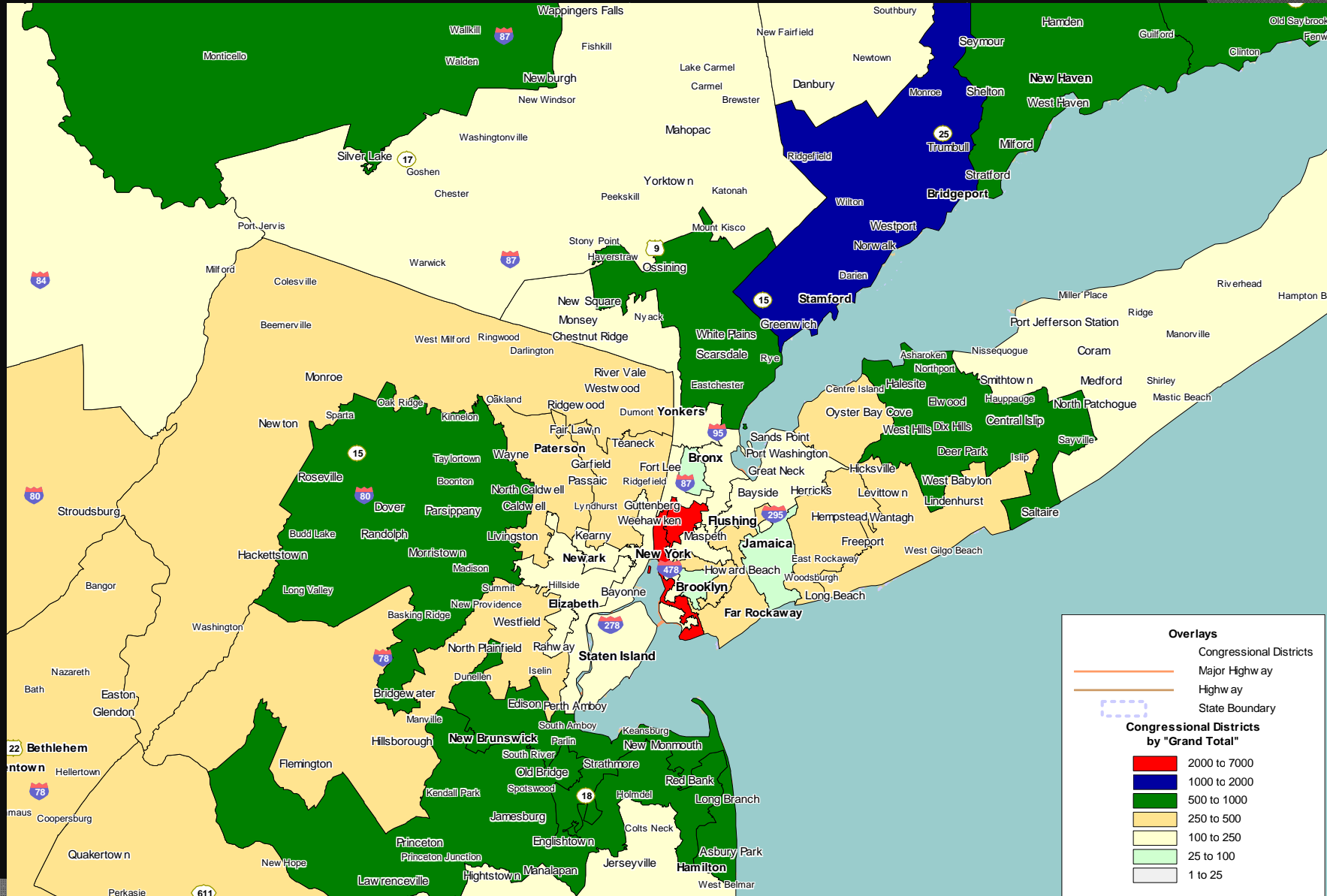
Source: U.S. Census Dept. 2006; six Internet NAICS codes

Internet employment is concentrated in Silicon Valley, but found throughout the Bay Area



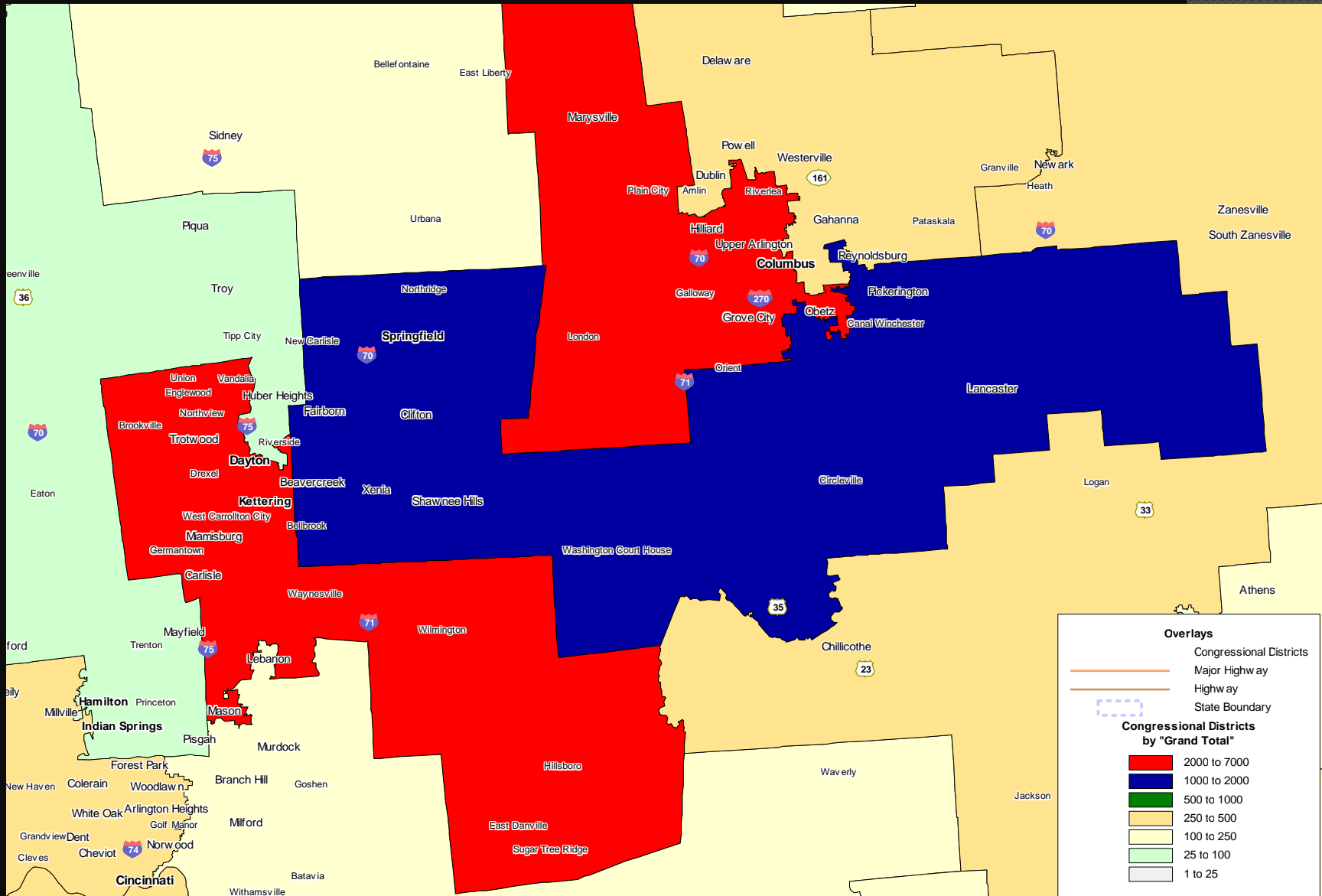
Source: U.S. Census Dept. 2006; six Internet NAICS codes

Similarly, Internet employment, though concentrated in Manhattan, is found throughout the greater New York area



Source: U.S. Census Dept. 2006; six Internet NAICS codes

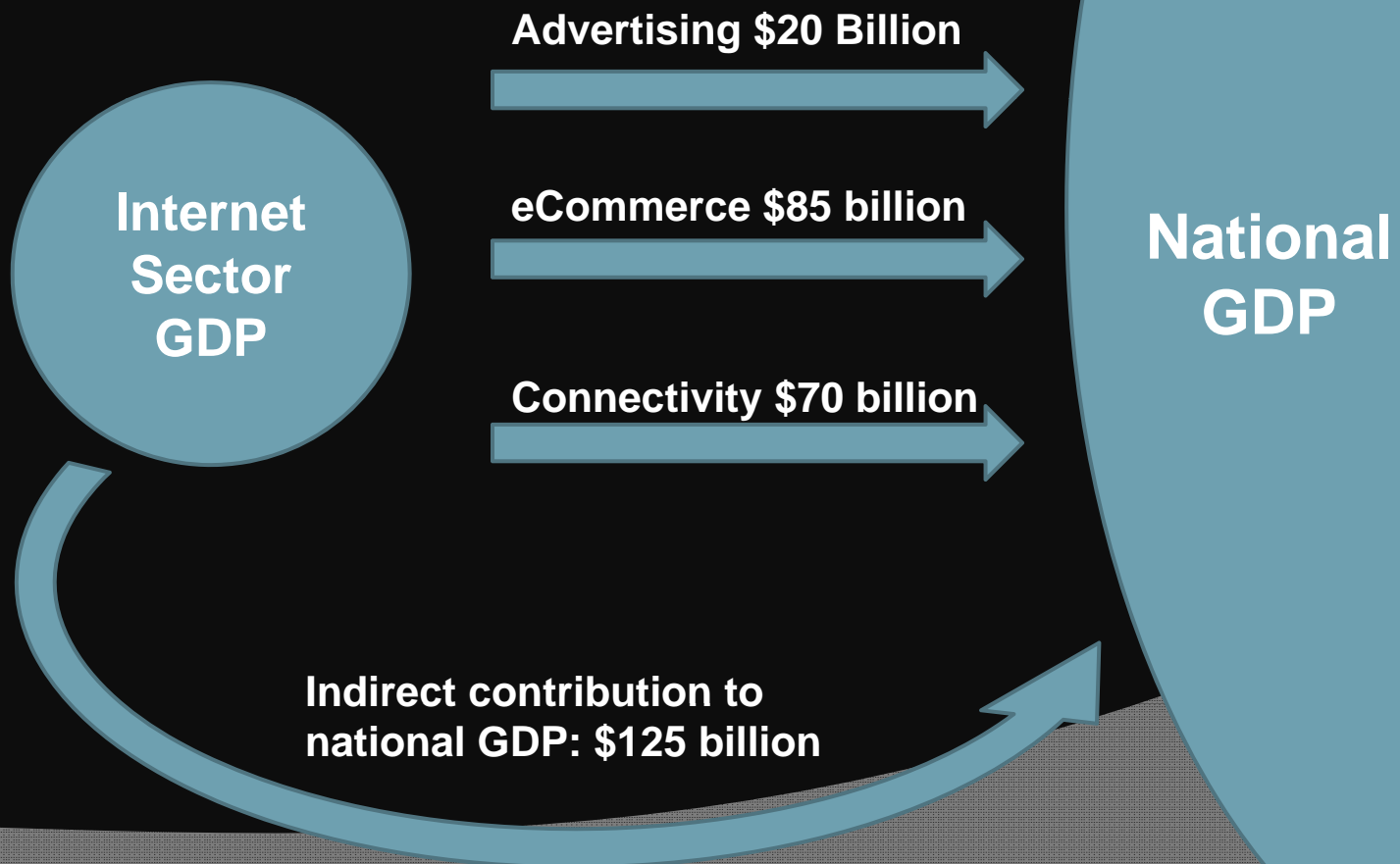
Columbus, Ohio, is one of many secondary cities where significant Internet employment is found



Source: U.S. Census Dept. 2006; six Internet NAICS codes

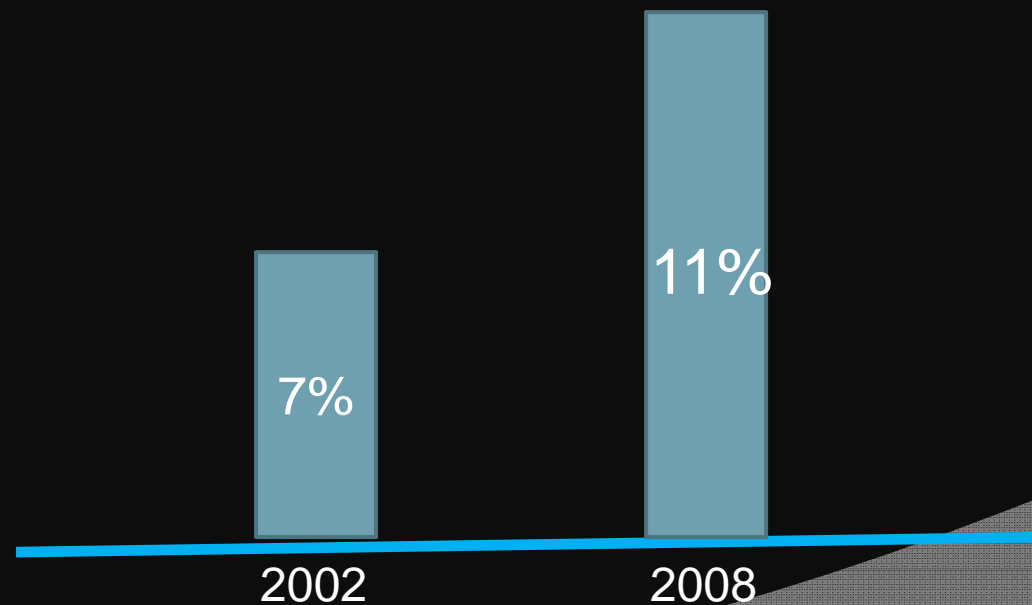
In conclusion, how much of the economic value of the Internet is advertising-supported?

The total contribution of the Internet to national GDP, \$300 billion, comes from four sources.



The U.S. economy ascribes four times more value to Internet advertising today than it did in 2002

Consequently advertising has almost doubled its share of the cost burden of the internet.



The Internet is vastly more than a way to advertise, but increasingly we have access to its social and economic benefits because of advertising.

We are learning what an unobtrusive, targeted, and efficient advertising medium it can be.