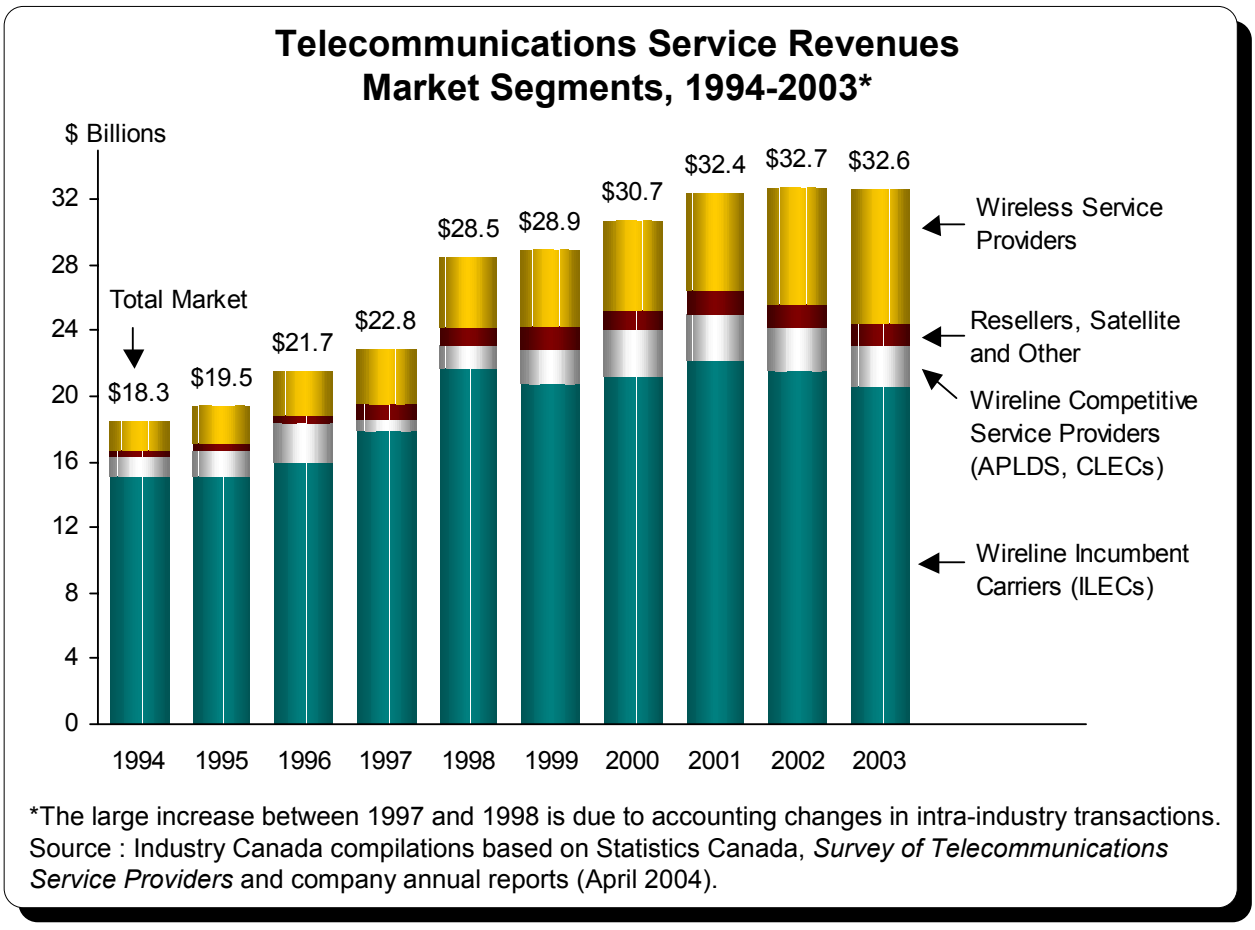
2.2 Telecommunications Services

This section provides a description of the telecommunications service industry's different segments with a focus on operating revenues, operating profits, capital investment, employment, salaries and access lines.

Canadian Telecommunications Service Market

In 2003, the total annual operating revenue for the telecommunications service industry was $32.6 billion which remained relatively flat compared to 2002 (Figure 2.2-1). From 1998 to 2003, total telecommunications service revenues grew at an average annual rate of 2.8 percent.[1] Since 1998, the majority of the increases in total revenue stem from growth in the wireless segment, which has increased at an average annual rate of 13 percent. Conversely, the revenues generated by the wireline incumbents and competitor segments, as well as the resellers, satellite and other market segments, have been relatively stagnant since 1999, and in some cases these segments have witnessed small declines.

Figure 2.2-1



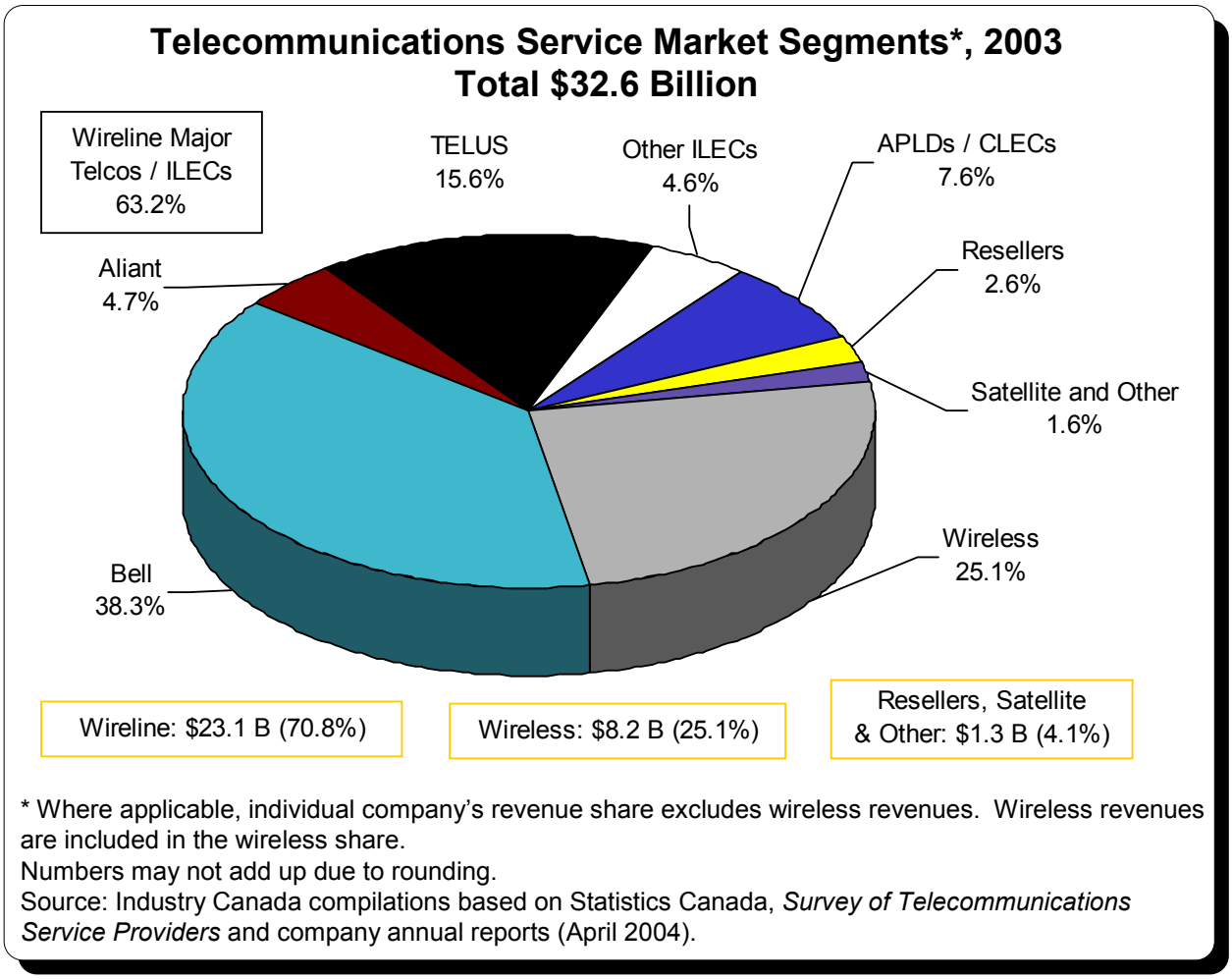
*The large increase between 1997 and 1998 is due to accounting changes in intra-industry transactions.
Source : Industry Canada compilations based on Statistics Canada, *Survey of Telecommunications Service Providers* and company annual reports (April 2004).

[1] The large increases in revenues between 1997 and 1998 are due to accounting changes, specifically the treatment of intra-industry transactions (i.e. interconnection, contribution). Since 1998, these transactions were reported on a gross basis, as opposed to a net basis.

In 2003, wireless service providers were the only telecommunications service segment that saw an increase in revenues, growing by $977 million, or almost 14 percent, when compared to 2002. Revenues for the wireline incumbent carriers, on the other hand, decreased by 4.2 percent, or $896 million, over the same period. Similarly, revenues earned by the wireline competitive service providers declined by $210 million, or 7.8 percent, in 2003. Resellers, satellite and other telecommunications service providers' revenues remained relatively flat in 2003 (Figure 2.2-1).

Between 2002 and 2003, changes occurred in the shares held by the wireline and wireless market segments. The wireless service providers increased their share of total telecommunications service revenues by 3.1 percentage points, at the expense of the wireline incumbent and competitive carriers. In this regard, the wireline incumbent carriers fell by 2.5 percentage points while the wireline competitive carriers decreased by 0.6 percentage points (Figure 2.2-2). The decline in the share of the revenue held by the ILECs stemmed primarily from Bell Canada and TELUS, whose share decreased by 1.4 and 0.6 percentage points, respectively.[2] The resellers/satellite segment remained stable at approximately 4.1 percent of total revenue.

Figure 2.2-2



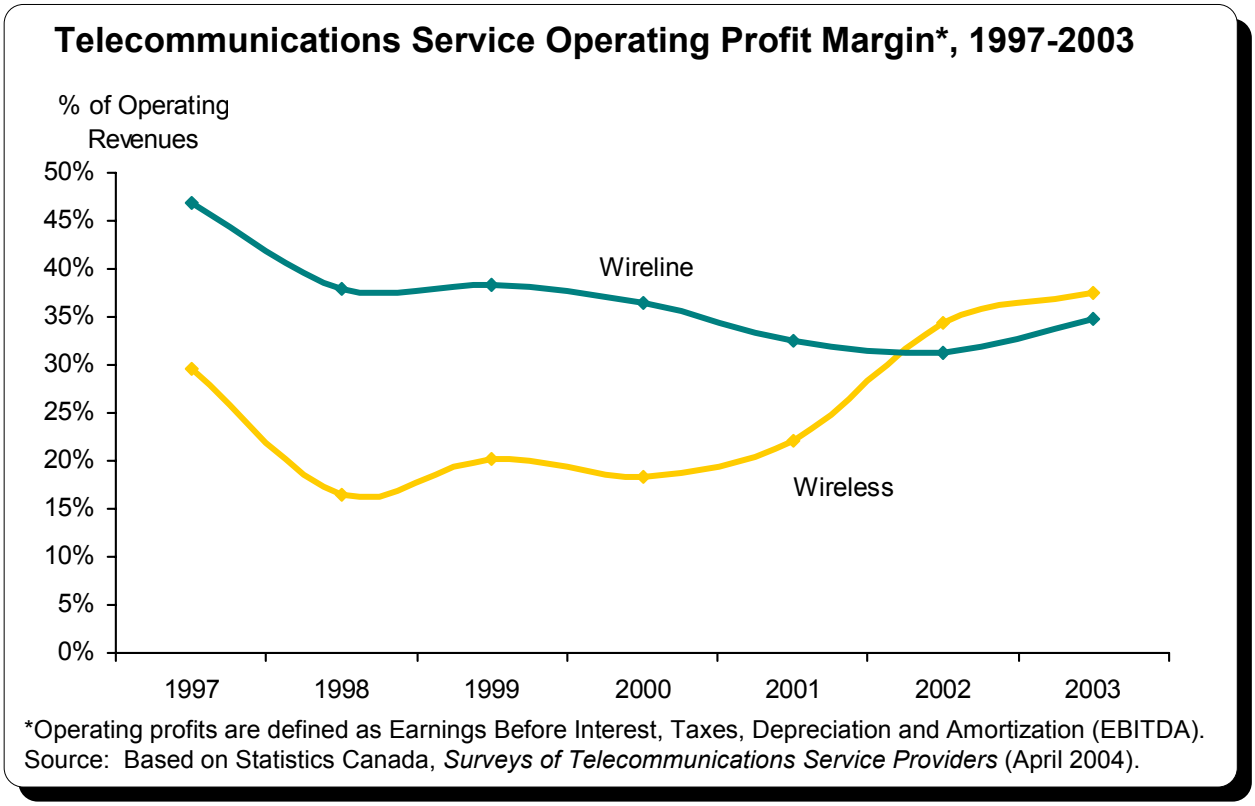
* Where applicable, individual company's revenue share excludes wireless revenues. Wireless revenues are included in the wireless share.
Numbers may not add up due to rounding.
Source: Industry Canada compilations based on Statistics Canada, *Survey of Telecommunications Service Providers* and company annual reports (April 2004).

[2] Where applicable, individual company's revenue share excludes wireless revenues. Wireless revenues are included in the wireless share.

2.2.2 Operating Profit -- Earnings Before Interest, Taxes, Depreciation & Amortization (EBITDA)

In 2003, telecommunications services' operating profit was approximately $11.1 billion, or 35 percent of operating revenues.[3] Figure 2.2-3 shows that the positive result can be attributed to both the wireline and wireless segments. In the late 1990s, the wireless segment experienced lower operating margins than the wireline segment due in part to the significant start-up costs associated with the introduction of Personal Communications Services (PCS). In 2002, the wireless operating margin surpassed that of wireline for the first time, and continued to do so in 2003, improving to 37 percent. The wireline segment's operating margin improved 3.6 percentage points to 35 percent in 2003 (Figure 2.2-3).

Figure 2.2-3

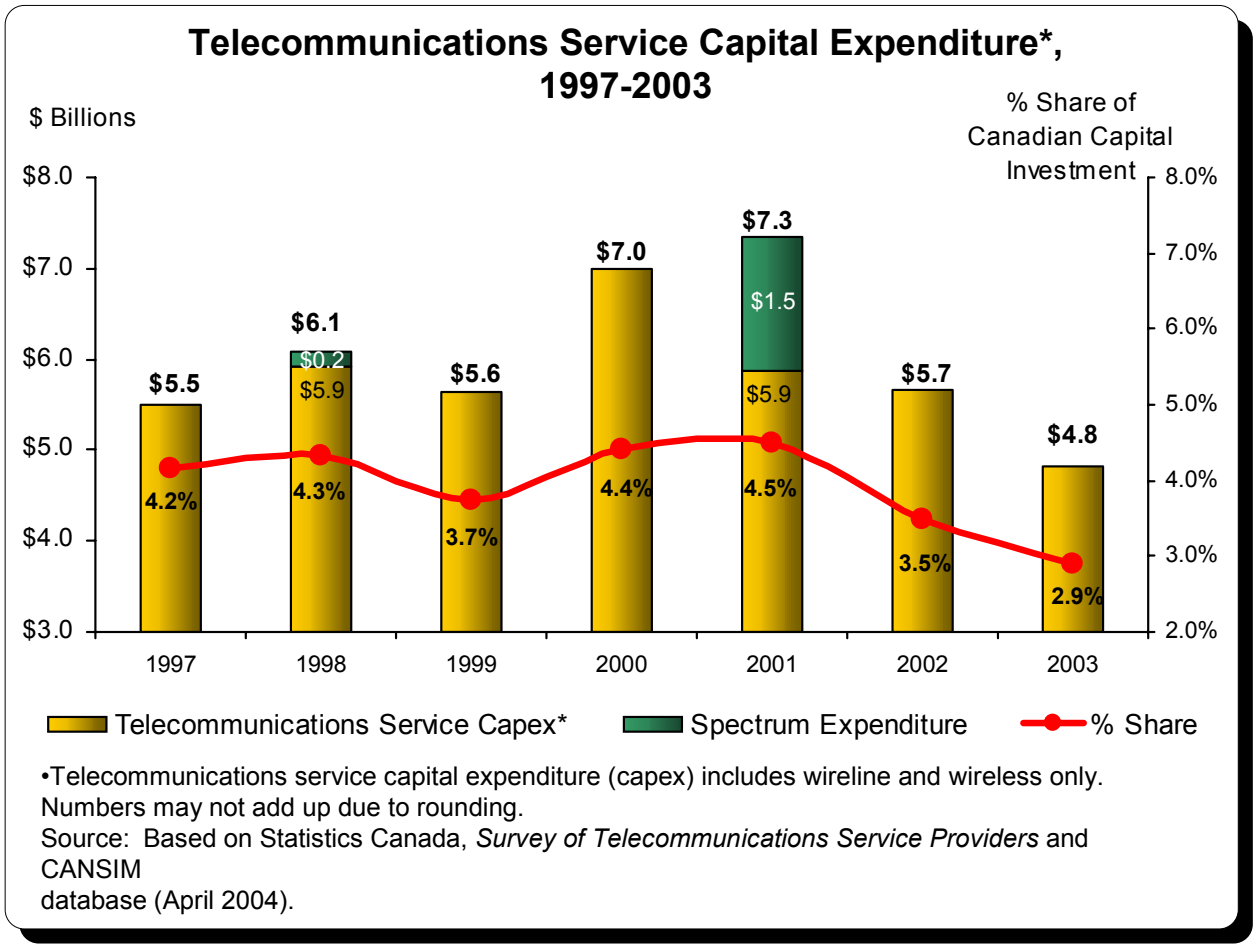


[3] Telecommunications services' operating profit includes wireline and wireless only.

2.2.3 Capital Investment

In 2003, capital expenditures for wireline and wireless telecommunications services were $4.8 billion (in current dollars). Telecommunications services' capital expenditures decreased by almost 15 percent compared to 2002. Relative to the total economy, the telecommunications service industry's share of the economy's capital investment was 2.9 percent in 2003, its lowest level over the past seven years (Figure 2.2-4).

Figure 2.2-4

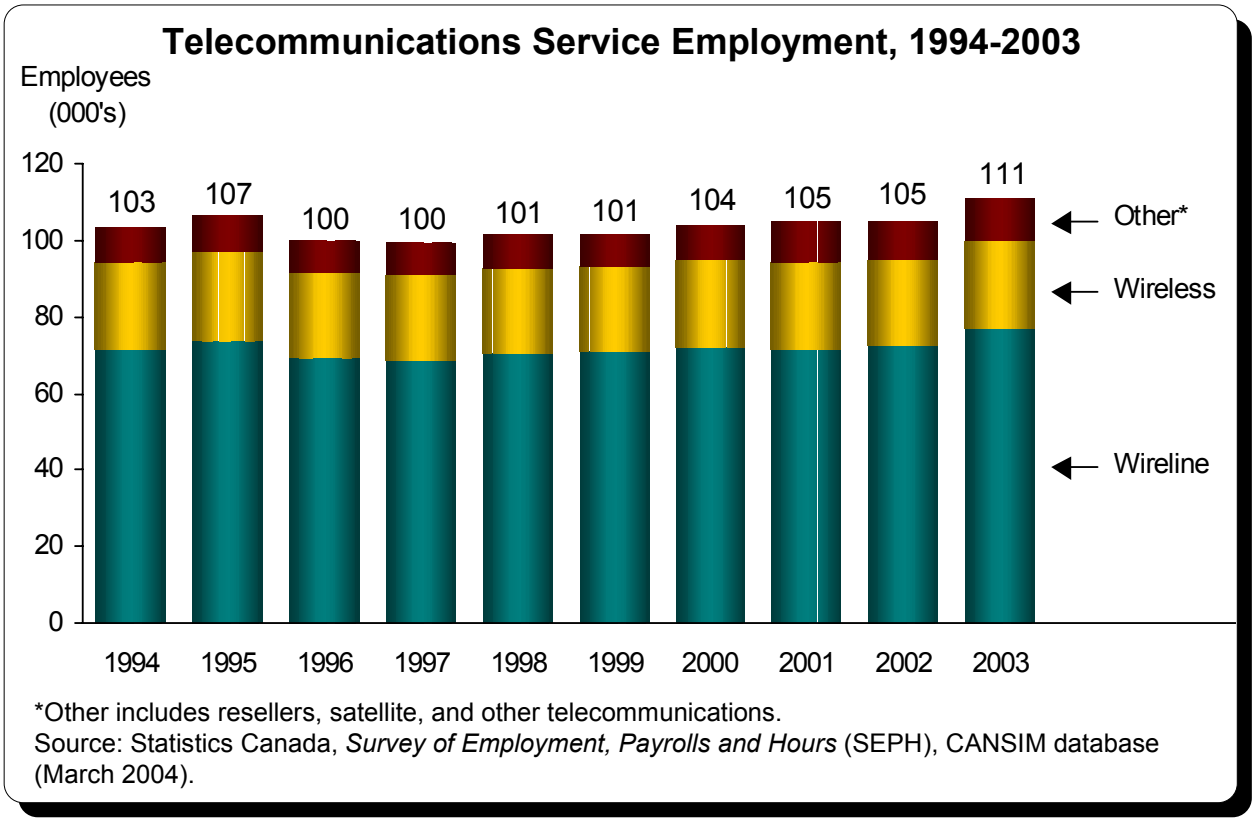


•Telecommunications service capital expenditure (capex) includes wireline and wireless only.
Numbers may not add up due to rounding.
Source: Based on Statistics Canada, *Survey of Telecommunications Service Providers* and CANSIM database (April 2004).

2.2.4 Employment

In 2003, the telecommunications service industry employed 110,834 persons, an increase of 5.5 percent over 2002. Since 1994, the composition of telecommunications service employment has remained relatively stable with approximately 69 percent coming from the wireline segment, 22 percent from wireless, and the remaining 9 percent from the resellers, satellite and other segment. All three segments saw employment growth in 2003, led by the wireline and resellers, satellite and other segments, which saw respective increases of 4,514 persons and 678 persons, when compared to 2002 (Figure 2.2-5).

Figure 2.2-5

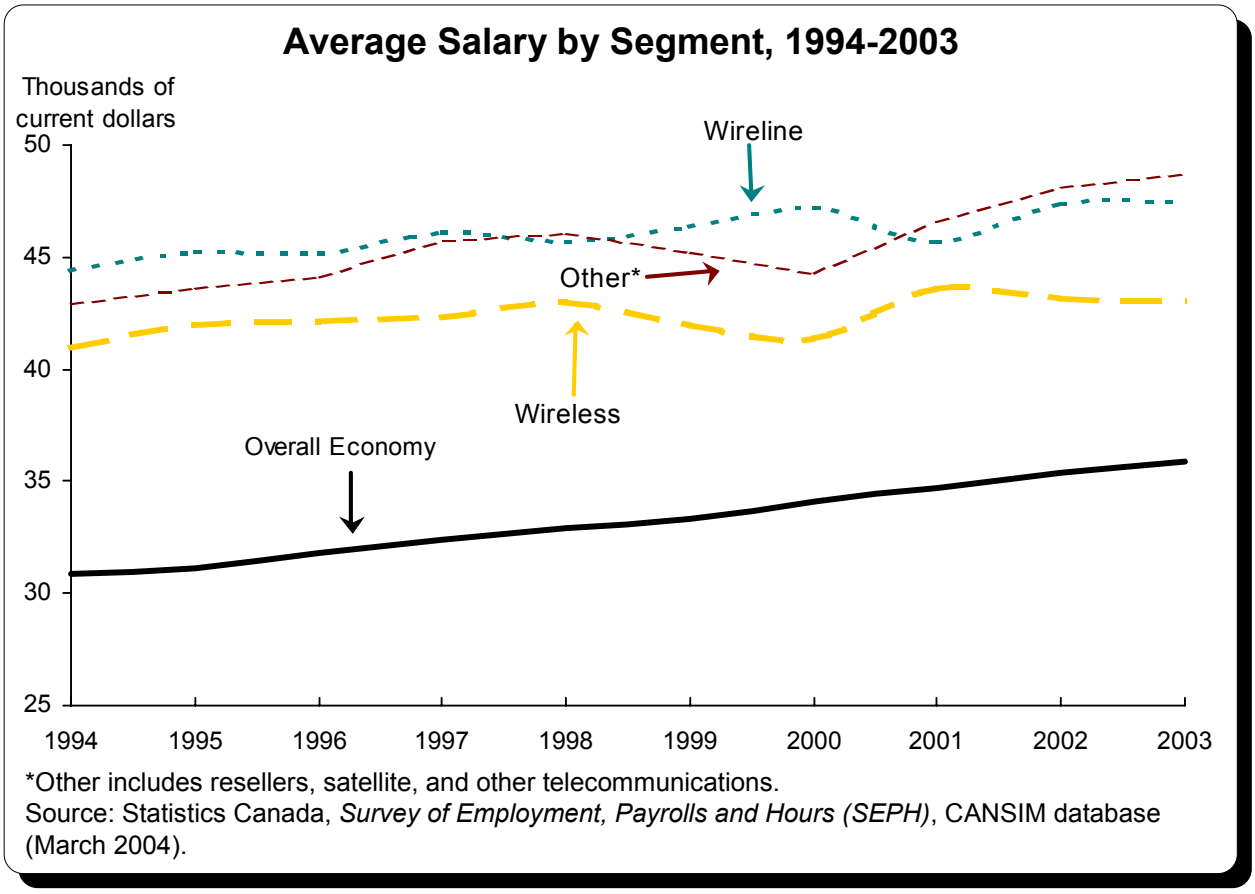


*Other includes resellers, satellite, and other telecommunications.
Source: Statistics Canada, *Survey of Employment, Payrolls and Hours* (SEPH), CANSIM database (March 2004).

2.2.5 Salaries

Since 1994, average annual salaries in telecommunications services have been well above the average annual salary in the Canadian economy as a whole. The wireline and wireless segments' average salaries were 32 percent and 20 percent higher (respectively) than the average annual salary for the total economy in 2003, remaining relatively unchanged at $47,410 and $43,096. Between 2000 and 2003, the resellers, satellite and other telecommunications segment saw its annual salary increase 3.3 percent, on average, per year to $48,761, primarily due to an increase in employment in higher paying jobs (Figure 2.2-6).

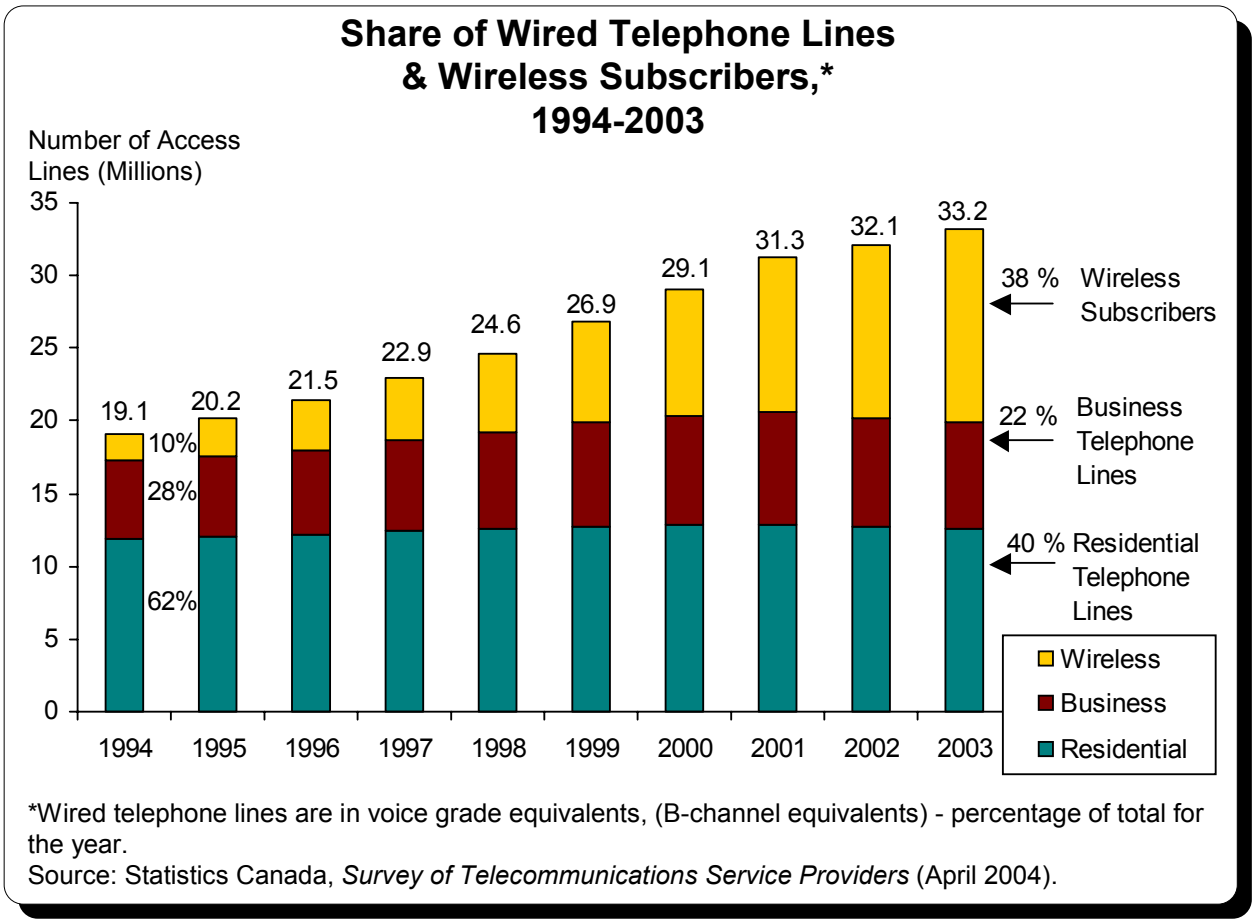
Figure 2.2-6



2.2.6 Access Lines

Telecommunications access lines grew at an average annual rate of 6.3 percent from 1994 to 2003, as the number of PSTN wired telephone lines and wireless subscribers want from an estimated 19.1 million to 33.2 million (Figure 2.2-7).[4]

Figure 2.2-7



*Wired telephone lines are in voice grade equivalents, (B-channel equivalents) - percentage of total for the year.
Source: Statistics Canada, *Survey of Telecommunications Service Providers* (April 2004).

The share of residential wired telephone lines declined from 62 percent (11.8 million) of the total lines in 1994, to 40 percent (12.7 million) at year-end 2003. To a lesser degree, the share of business wired telephone lines decreased as well over this period, from 28 percent (5.4 million) in 1994 to 22 percent (7.3 million). The largest change has occurred in the share of wireless subscribers, which increased from 10 percent (1.9 million) in 1994 to 40 percent (13.2 million) in 2003 (Figure 2.2-7).

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[4] The term **access line** throughout this section refers to a wireline or wireless transmission path that connects a customer of a telecommunications service provider.

2.2.7 The Teledensity Indicator

International organizations, such as the International Telecommunication Union (ITU) compare international telecommunications development by means of the number of residential and business individual access lines per 100 inhabitants, also referred to as teledensity. Figure 2.2-8 shows the evolution of teledensity in Canada over time. It has increased significantly in recent years, from 65.8 access lines per 100 inhabitants in 1994, to 104.6 access lines per 100 inhabitants at year-end 2003, representing a greater than one-to-one ratio of total telecommunications access lines to population.[5] There were 39.9 residential and 23.0 business wired telephone lines per 100 inhabitants in 2003. The corresponding teledensity indicator of wireless subscribers was 41.7 subscribers per 100 inhabitants. The rise in total teledensity has been primarily a result of the wireless component which has increased by 35.3 subscribers per 100 inhabitants since 1994. Conversely, wireline business teledensity had a more modest increase of 4.4 access lines per 100 inhabitants over this period, while wireline residential teledensity has fallen by 0.9 lines per 100 inhabitants, due to the recent decline in residential wired telephone lines (Figure 2.2-8).

Teledensity Indicator

The number of main lines per 100 inhabitants, i.e. teledensity, has traditionally been used as an indicator of a country's telecommunications network's deployment and the degree to which its households and businesses are connected to that network. In its original version, this indicator provided a measure of the development of the wireline public switched telephone network (PSTN) in a specific country or region.[6] In the 1990s, the definition of the teledensity indicator was broadened to include mobile (wireless) subscribers to the PSTN to reflect the introduction and importance of wireless access.[7]

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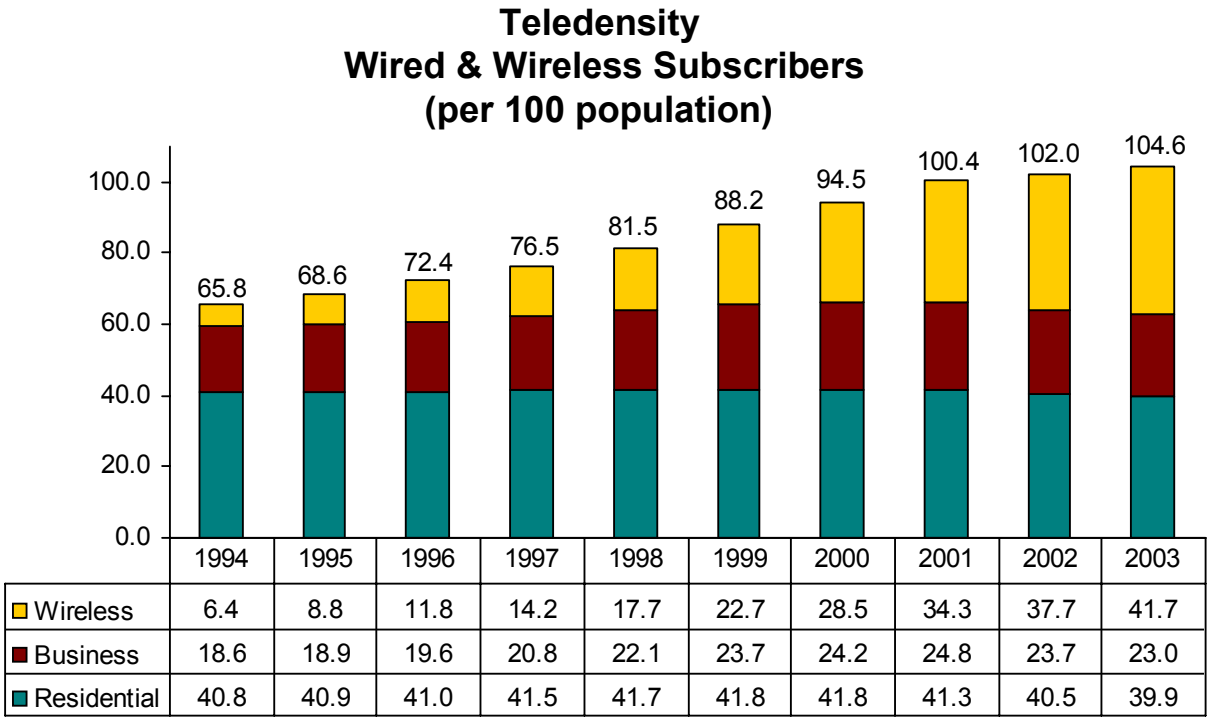
5 The 104.6 access lines per 100 inhabitants reflects an average over the country. Some Canadians may have multiple lines while other Canadians may not have access. Statistics Canada reports that 97.9 percent of Canadian households had a telephone in 2002, CANSIM database (December 2003).

6 Public Switched Telephone Network (PSTN) is defined by Statistics Canada as, "the world-wide dial-up network (switching, circuits, transmissions and access services) or a portion of that network, used to establish voice and non-voice (text, audio or data) communications carried over a path initially established using normal telephone signaling and ordinary switched long-distance telephone circuits." – Statistics Canada, *Quarterly Telecommunications Statistics*, 56-002-XIE.

7 International Telecommunication Union (ITU), *World Telecommunications Development Report*, 1998, and Organization for Economic Co-operation and Development (OECD), *Communications Outlook*.

Figure 2.2-8



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Wireless	6.4	8.8	11.8	14.2	17.7	22.7	28.5	34.3	37.7	41.7
Business	18.6	18.9	19.6	20.8	22.1	23.7	24.2	24.8	23.7	23.0
Residential	40.8	40.9	41.0	41.5	41.7	41.8	41.8	41.3	40.5	39.9

Numbers may not add up due to rounding.
Source: Statistics Canada, *Survey of Telecommunications Service Providers* (April 2004).

Other measures of teledensity include the number of wired residential telephone lines per 100 households and wired business telephone lines per 100 persons employed. All these indicators demonstrate the slow decline in wired residential and business teledensities in Canada that has occurred since 1999 (Table 2.2-1).

Table 2.2-1 Other Teledensity Indicators*

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Wired residential telephone lines per 100 households	111	111	110	111	111	110	110	108	106	104
Wired business telephone lines per 100 persons employed	50.8	51.1	53	55.1	57.6	59.5	59	58.9	54.6	54.6

*As of period end, 1994-2003.
Source: Statistics Canada, *Survey of Telecommunications Service Providers* (April 2004).