LOCAL TELECOMMUNICATION COMPETITION SURVEY

YEAR 2009 REPORT

Economic Research and
Financial Analysis Division

Public Utility Commission of Oregon

December 2009

TABLE OF CONTENTS

Executive Summary

In January 2009, the staff of the Public Utility Commission of Oregon (OPUC) sent its ninth survey to the 269 certified local exchange carriers (LECs) in Oregon for the purpose of assessing the status of local telephone competition in Oregon. The survey asked all carriers, both incumbent local exchange carriers (ILECs) and competitive local exchange carriers (CLECs), to provide information about the local services they provided in 2008. Survey responses were received from all 34 ILECs and 183 out of 235 CLECs, for a total response rate of 81 percent.

HIGHLIGHTS

Total Oregon Local Exchange Service Revenue 2008..... $891.3 Million

ILEC Revenue - $Millions / Share ..... $716 / 80.3%

CLEC Revenue - $Millions / Share..... $176 / 19.7%

Total Switched Lines at Year-end 2008……1,771,220

ILEC Switched Lines / Market Share..... 1,436,946 / 81.1%

CLEC Switched Lines / Market Share ..... 334,274 / 18.9%

Total Residential Switched Lines at Year-end 2008..... 942,043

ILEC Residential Switched Lines / Market Share 891,937/ 94.7%

CLEC Residential Switched Lines / Market Share ..... 50,106 / 5.3%

Total Business Switched Lines at Year-end 2008 …… 660,887

ILEC Business Switched Lines / Market Share ..... 380,774 / 57.6%

CLEC Business Switched Lines / Market Share 280,113 / 42.4%

Total Wholesale Switched Lines at Year-end 2008……168,290

ILEC Wholesale Switched Lines / Market Share..... 164,235 / 97.6%

CLEC Wholesale Switched Lines / Market Share……4,055 / 2.4%

Change from prior Year - Total Switched Lines / % Change..... -144,365 / -7.5%

Change from prior Year - ILEC Switched Lines / % Change..... -168,965 / -10.5%

Change from prior Year - CLEC Switched Lines / % Change ..... 24,600 / 7.9%

UNE-P and QPP, Lines / % Change from Prior Year ..... 66,228 / 57.3%

CLECs Having Certificates ..... .235

CLECs Doing Business / % of Total CLECs..... ..130 / 55.3%

Total Number of Private Line Circuits 33,067

Lower Capacity Circuits / % of Total……17,669 / 53.4%

Higher Capacity Circuits / % of Total……15,398 / 46.6%

Total Number of Digital Subscriber Lines..... ……..378,118

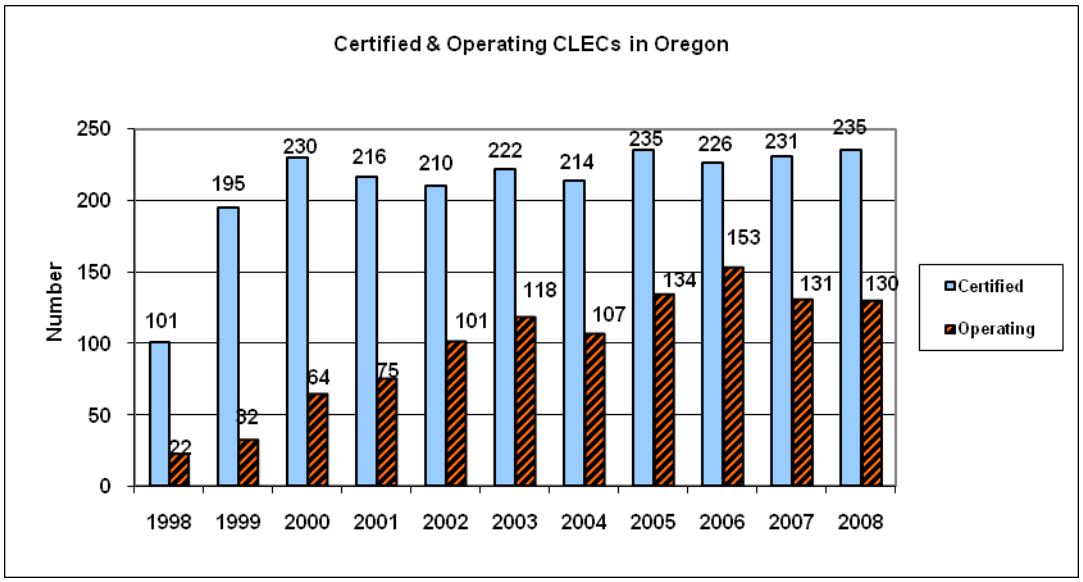
All LEC Capital Expenditures - $Millions / % of Revenue …… .$156.2 / 17.5%

ILEC Capital Expenditures - $Millions / % of Revenue……...$104.4 / 14.6%

CLEC Capital Expenditures - $Millions / % of Revenue……...$51.8 / 29.4%

Growth in the number of operating competitive local exchange providers has leveled off over the last several years. Over the last ten years, the number of certified CLECs increased from 101 to 235 and the number of CLECs actually providing services in Oregon increased from 22 to 130.

CLEC Certificate Trends 1998 through 2008



As of December 2008, 130 out of the 235 certified CLECs reported that they were actually providing local exchange services (55.3%, down from 56.7% in 2007). By using a widely recognized measure of market share, percentage of local switched telephone lines, CLEC market share was 19 percent (up from 16.2% in 2007). According to the survey responses, competitive entry in Oregon's residential telecommunications market is still small. In 2008, CLECs had a 5.3 percent (up from 4.4% in 2007) share of the Oregon residential market. Most competitive entry is in the business market. CLECs were supplying 42.4 percent (up from 39.6% in 2007) of business customers' switched local exchange lines statewide.

The number of total Oregon LEC switched local exchange lines dropped 7.5 percent, from 1.91 million to 1.77 million in 2008. The following table summarizes the switched lines serviced in Oregon.

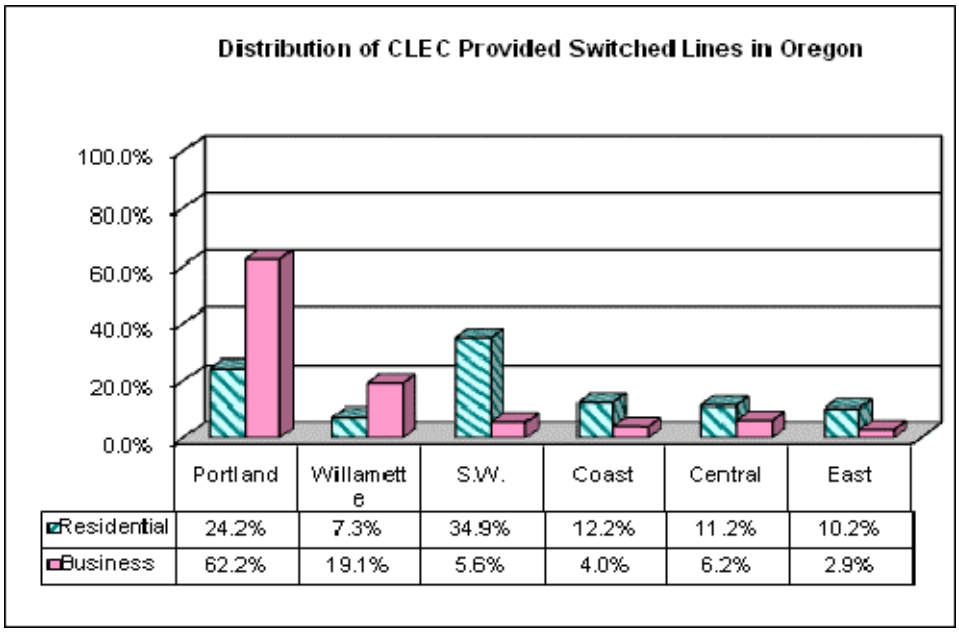
Survey Response Rates and Service Operation Rates

2008	Surveys Sent	Responses	Response Rate
Total LECs	269	217	80.7%
ILECs	34	34	100.0%
CLECs	235	183	77.9%
	Surveys Sent	**Services Provided**	**Operating Rate**
Total LECs	269	164	61.0%
ILECs	34	34	100.0%
CLECs	235	130	55.3%

Competitive entry into Oregon's telecommunications market varies by region. Eighty-four percent of CLEC's lines are for business customers. CLECs provided the service in Portland (62%), and Willamette Valley (19%). Nineteen percent of CLEC business lines were in the Coast, Central, Southwest, and East regions.

Of the 1.77 million switched access lines served by all local exchange carriers, 53 percent were residential lines. CLECs served 5.3 percent of Oregon's 0.94 million residential lines. Thirty-nine percent of all residential lines were in the Portland area, where CLECs served 3.3 percent.

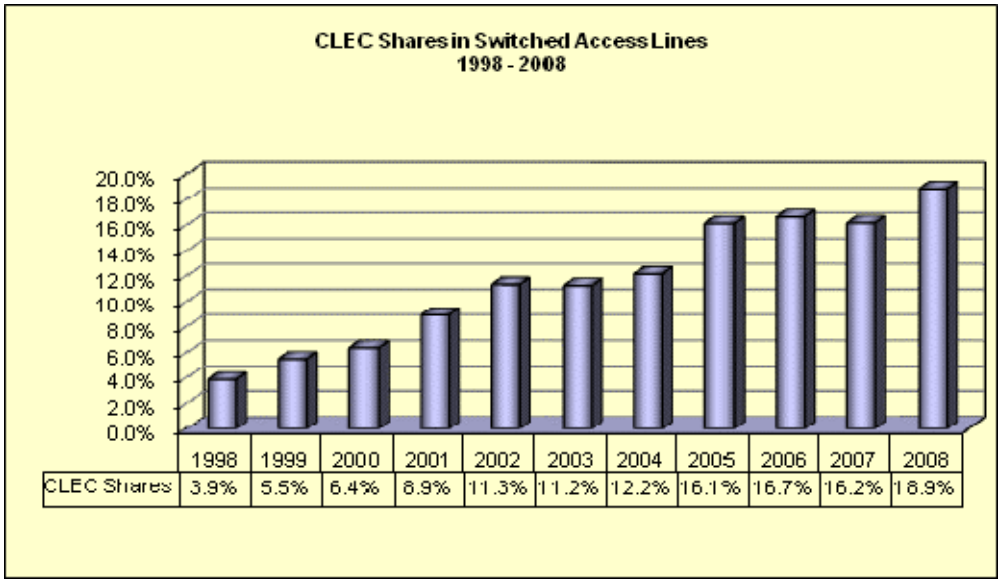
Distribution of CLECs' Switched Access Lines by Region



	Portland	Willamette	S.W.	Coast	Central	East
Residential	24.2%	7.3%	34.9%	12.2%	11.2%	10.2%
Business	62.2%	19.1%	5.6%	4.0%	6.2%	2.9%

Approximately 62 percent of CLEC's business lines and 24 percent of CLEC's residential lines were in the Portland Metropolitan area. CLECs' switched service revenues were $138 million in 2008, up from $115 million in 2007.

CLECs' Share of Switched Access Lines: 1998 – 2008



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
CLEC Shares	3.9%	5.5%	6.4%	8.9%	11.3%	11.2%	12.2%	16.1%	16.7%	16.2%	18.9%

The share of switched access lines served by CLECs at the end of 2008 represented 18.9 percent of total switched access lines in Oregon, compared with a national CLEC share of 19.4 percent as of the end of June 2008 (FCC Table 1 - End-User Switched Access Lines Reported). CLECs had 5.3 percent of the residential market in Oregon compared with 13.8 percent nationally. In the business market CLECs had 42.4 percent in Oregon compared to 27.2 percent nationally.[1]

The number of CLEC lines in Oregon increased by 7.9 percent in 2008, from 309,674 (in 2007) to 334,274. By comparison, total ILEC lines decreased by 10.5 percent in 2008, from 1,605,911 (in 2007) to 1,436,946.

[1] Source of national data is the July 23, 2009, Federal Communications Commission (FCC) News Release on "Local Telephone Competition." The statistics released reflect data as of June 30, 2008.

I. Purpose of the Survey

The purpose of the survey is to collect information from incumbent and competitive local exchange carriers to determine the status of competition for local exchange services in Oregon. This study is a key component of the 1999 Oregon legislation requiring the Public Utility Commission to report on telecommunications issues.

II. Survey Participants and Responses

In January 2009, Commission staff sent a survey to all 269 carriers holding a certificate issued by the Commission to provide local services in Oregon. Of the 269 LECs, 34 are ILECs, and 235 are CLECs. The ILECs consist of 23 telecommunications utilities and 11 cooperatives. These are the traditional local telephone service providers in the state. CLECs compete with the traditional local service providers. The survey asked each LEC to provide information regarding their operations in 2008.

All 34 ILECs responded to the survey. For CLECs, 183 of the 235 (77.9%) responded. The overall response rate for all LECs was 80.7 percent (Table 1). In 2008, 61 percent (versus 62% in 2007) of all certified carriers were actually providing services, with 100 percent of ILECs and 55 percent (versus 57% in 2007) of CLECs (130 out of 235) providing services. This analysis, assumes non-responding CLECs were not providing local service in Oregon in 2008.

Table 1. Survey Response Rates and Service Operation Rates

2008	Surveys Sent	Responses	Response Rate
Total LECs	269	217	80.7%
ILECs	34	34	100.0%
CLECs	235	183	77.9%
	Surveys Sent	**Service Provided**	**Operation Rate**
Total LECs	269	164	61.0%
ILECs	34	34	100.0%
CLECs	235	130	55.3%

III. Service Types

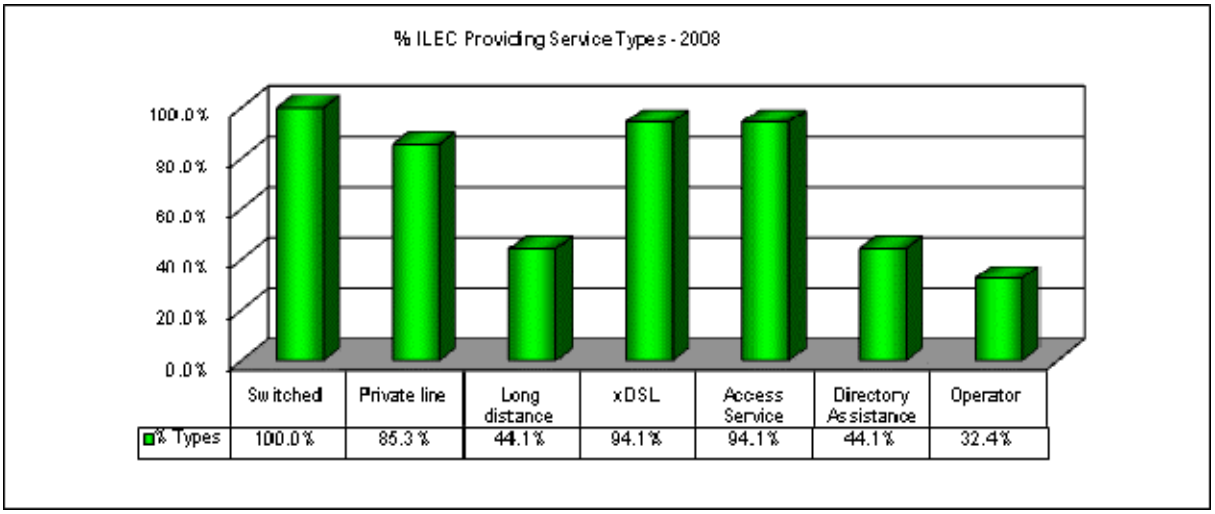
1. ILEC Service Types

All 34 certified ILECs provided local exchange switched services to retail customers. Local switched services include dial tone, local (toll-free) calling, directory listings, and various features such as call waiting and caller ID. Local exchange private line (i.e., dedicated and point-to-point) services include DSL (Digital Subscriber Line) services. ILEC service types and the percentage providing each type of service in 2008 are shown in Table 2 and Figure 1.

Table 2. ILEC Market Coverage by Service Category

Service Types	ILECs Providing Service	Percent of Total ILECs
Local Exchange Switched Service	34	100.0%
Local Exchange Private Line Service:	29	85.3%
Lower Capacity	29	85.3%
Higher Capacity	20	58.8%
Long Distance Service	15	44.1%
xDSL (Digital Subscriber Line)	32	94.1%
Access Services	32	94.1%
Directory Assistance Services	15	44.1%
Operator Services	11	32.4%
Telecom using Cable TV Facilities	0	0.0%
Telecom using VoIP	0	0.0%
Other Services	6	17.6%

Figure 1. ILEC Service Types and Distributions



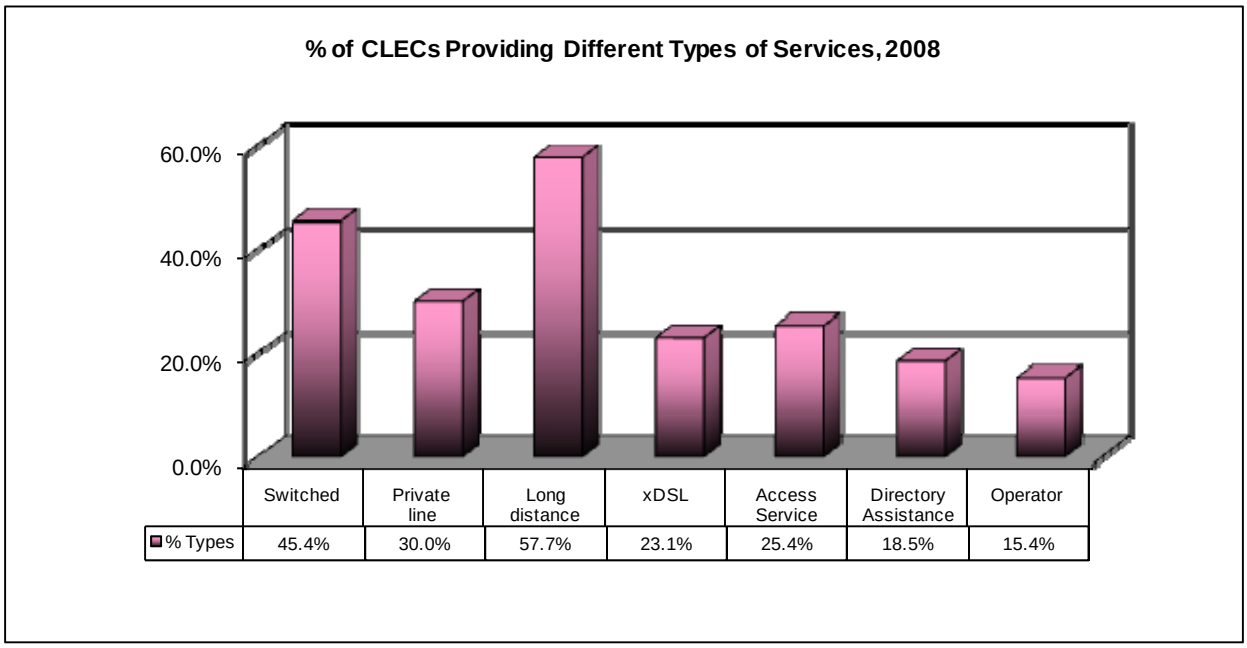
2. CLEC Service Types

As of December 2008, 130 (55%) of the 235 certified CLECs were providing some kind of telecommunications service in Oregon (down from 57% in 2007). This analysis assumes non-responding CLECs were not providing local service in Oregon in 2008. Of the 130 CLECs providing services, 59 were providing local exchange service (versus 66 in 2007). Seventy-five CLECs were providing long distance service (83 in 2007), and 65 were providing inter-exchange private line services. CLEC service types and distributions are shown in Table 3 and Figure 2.

Table 3. CLEC Market Coverage by Service Category

CLEC Service Types	CLECs Providing Service	Percent of Total CLECs
Operating CLECs	**130**	
Local Exchange Switched Services	**59**	**45.4%**
Local Exchange Private Line Services:	**65**	**50.0%**
Lower Capacity	**20**	**15.4%**
Higher Capacity	**32**	**24.6%**
Long Distance Service	**75**	**57.7%**
xDSL (Digital Subscriber Line)	**30**	**23.1%**
Access services	**33**	**25.4%**
Directory Assistance Services	**24**	**18.5%**
Operator Services	**20**	**15.4%**
Telecom using Cable TV Facilities	**4**	**3.1%**
Telecom using VoIP	**13**	**10.0%**
Other Services	**42**	**32.3%**

Figure 2. Distribution of CLEC Services



IV. Switched Services – Market Size and Share Analysis

1. Market Size and Shares

In 2008, there were 130 CLECs competing in the local telecommunication services market. The CLECs as a group had a market share ranging between 7.8 percent and 20.3 percent, depending on how market share is measured. In this report, market share is measured in three ways: by the number of customers; by the number of lines; and by revenues.

Table 4. 2008 Oregon Switched Service Market Shares

2008	Customers	Lines	Revenue ($millions)
ILECS	981,094	1,436,946	562.8
CLECS	83,112	334,274	138.0
Total	1,064,206	1,771,220	700.9
%	**Customers**	**Lines**	**Revenue**
ILECS	92.2%	81.1%	80.3%
CLECS	7.8%	18.9%	19.7%
Total	100.0%	100.0%	100.0%

CLECs' share of retail customers[2] in 2008 was 7.8 percent. Few customers obtained local exchange switched services from anyone other than their traditional supplier, the ILEC. According to the survey responses, Oregon LECs were providing local exchange switched services to 1,064,206 Oregon customers. ILECs served 981,094 (92.2 percent) of the total, while CLECs served 83,112 customers (7.8%). (See Table 4).

CLECs' share of retail lines[3] in 2008 was 18.9 percent (Figure 3). Oregon LECs supplied 1,771,220 (down 7.5% from a year earlier) local switched telephone lines to retail customers. Of that total, ILECs supplied 81.1 percent (1,436,946 or 10.5% less than the prior year) of all lines and CLECs the remaining 334,274 (18.9% of total and a 7.9% increase from the prior year). CLECs supplied an average of 4.0 lines per customer (up from 3.5 in 2007), while ILECs supplied an average of 1.5 lines per customer (and 1.5 in 2007).

CLECs' share of retail revenues[4] in 2008 was 20 percent (Figure 3), up from 15% in 2007. In 2008, retail revenues from total switched access services in Oregon were an

---

[2] DEFINITIONS are from INSTRUCTIONS FOR ANNUAL REPORTS (FORM C AND FORM L) at http://www.puc.state.or.us/PUC/telecom/forms/2009/C_L09_Instructions.pdf

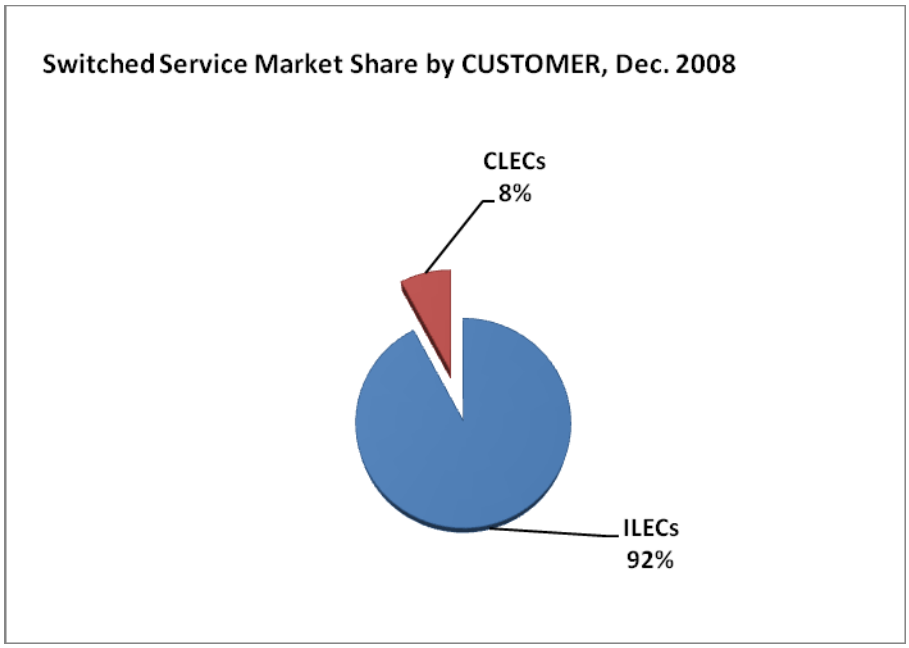
Customer – a person or entity that had applied for, been accepted, and was receiving service for a price during the period covered by this report. A customer can have multiple lines; for example, if you send only one bill to a business, governmental agency, or residence, count the bill a one customer.

[3] **Local exchange line** – a voice-level transmission path (64 kbps digital or less than 4 kHz analog) that links an end user (retail customer) location with the switching center that provides dial tone.

[4] **Revenues** – the cash inflows or equivalents from your operations during the year.
Exclude loan proceeds, shareholder contributions, and taxes that you billed to customers.
Include regulated and nonregulated charges; federal and state charges; federal and Oregon universal service end-user surcharges and distributions; charges for switched lines, local usage, extended area service, repair and maintenance services, directory listing services, and add-on

estimated $701 million (down from $734 million in 2007). ILECs received $562.8 million (down from $618.4 million in 2007), or 80 percent of total switched access line revenue, and CLECs received the remaining $138 million (up from $115.5 million in 2007), or 20 percent of total switched access line revenues.

Figure 3. Market Shares for Switched Service



CLECs achieved a higher share of lines per customer (with roughly comparable revenues per line) and a correspondingly significantly higher share of revenues than customers. This was due to CLECs' focus on business customers. Eighty-five percent of CLECs' switched service revenues was from business customers in 2008. Thirty-nine percent of ILECs' switched service revenues was from business customers in 2008. ILECs' average annual switched service revenue per line was $392. CLECs' average annual switched service revenue per line was $396 (see Table 5).

Table 5. 2008 Average Switched Service Customers, Lines and Revenues

2008	CLECs	ILECs
Lines per Customer	**4.0**	**1.5**
Annual Revenue per Line	**$396**	**$392**
Annual Revenue per Customer	**$1,661**	**$574**

features such as call waiting, voice messaging, and caller identification; and charges for private line circuits and add-on capabilities such as multiplexing, conditioning, and bridging.

The 34 ILECs providing local exchange switched service had 92 percent of customers, (93 percent in 2007), 81 percent of switched access lines (84 percent in 2007) and 80 percent of switched service revenues (down from 84%) (see Table 4). In 2008, the "big four" ILECs (CenturyTel, Qwest, United,[5] and Verizon) had 82 percent of total customers (versus 83.5% in 2007), 74 percent of total exchange lines (77% in 2007), and 74 percent of total switched service revenues (down from 78% in 2007).

Table 6. 2008 Market Shares of ILECs, CLECs and Big 4 ILECs

CUSTOMERS	ILECs	CLECs	Big-4 ILECs
Residential	95.2%	4.8%	85.1%
Business	73.4%	26.6%	62.1%
Wholesale	93.5%	6.5%	93.5%
Total Customers	92.2%	7.8%	82.0%
SWITCHED LINES	**ILECs/Total**	**CLECs/Total**	**Big-4 ILECs/Total**
Residential	94.7%	5.3%	84.5%
Business	57.6%	42.4%	53.1%
Wholesale	97.6%	2.4%	97.6%
Total Lines	81.1%	18.9%	74.0%
REVENUES	**ILECs/Total**	**CLECs/Total**	**Big-4 ILECs/Total**
Residential	94.4%	5.6%	84.6%
Business	64.9%	35.1%	61.0%
Wholesale	94.0%	6.0%	94.0%
Total Revenues	80.3%	19.7%	73.9%

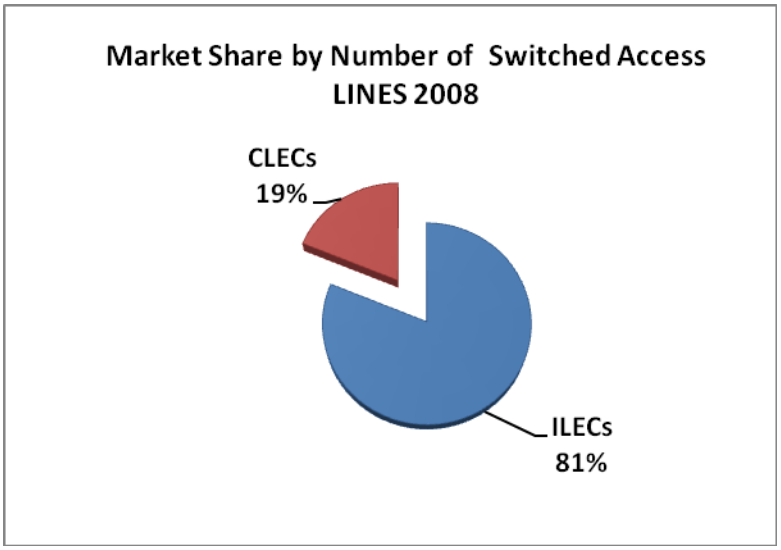
A. Business Market Share

CLECs supplied service to 26.6 percent of business customers in 2008, compared to 7.8 percent of all types of customers. CLECs supplied 42.4 percent (39.6% in 2007) of business switched access lines (see Figure 4). This is substantially greater than the 19 percent CLEC share of Oregon total lines. Similarly, CLECs had a 35.1 percent (30.5% in 2007) share of switched business service revenues, compared to a 19.7percent (15.7% in 2007) of total revenues in the State switched service.

[5] Both CenturyTel and United are currently doing business as CenturyLink.

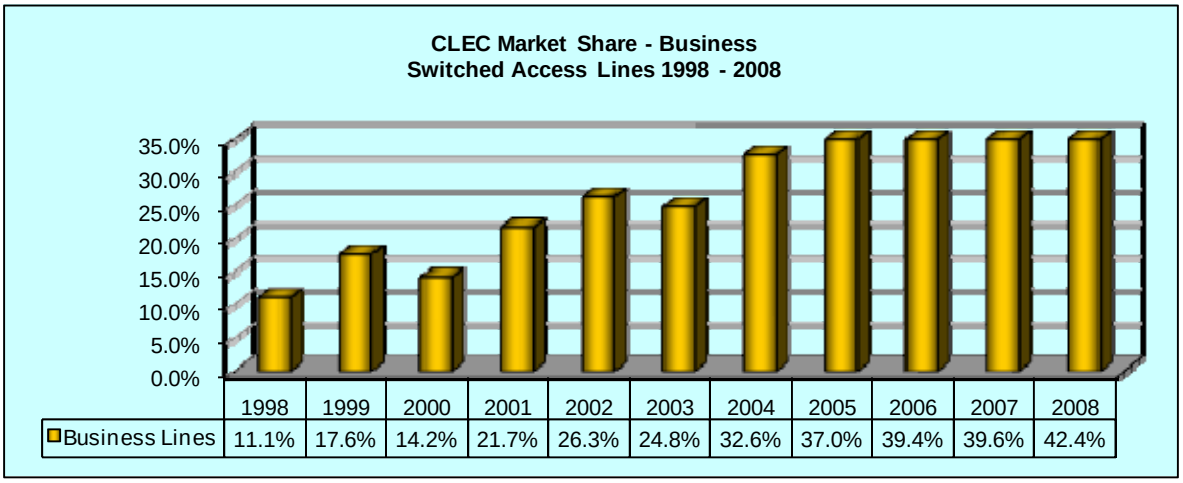
CLECs had 19.7% of Oregon total business revenues and ILECs had 80.3%. CLECs had 18.9% of total business lines, and ILECs had 81.1%. The 2008 CLEC annual revenue per business line was $419. ILECs average was $570 per business line.

Figure 4. Business Market Share, Measured by Lines Served



CLECs' market share of switched access lines for business has steadily increased over the past 10 years, growing from 11 percent in 1998 to 42 percent in 2008 (see Figure 5).

Figure 5. CLEC Business Line Market Share Growth



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Business Lines	11.1%	17.6%	14.2%	21.7%	26.3%	24.8%	32.6%	37.0%	39.4%	39.6%	42.4%

B. Residential Market Share

Table 7. 2008 Residential Switched Services Market Shares

Residential	Customers	Lines	Revenues ($millions)
ILECs	867,010	891,937	302.5
CLECs	43,339	50,106	17.9
Total	910,349	942,043	320.4
ILECs/Total	95.2%	94.7%	94.4%
CLECs/Total	4.8%	5.3%	5.6%

CLECs' share of residential customers was 4.8 percent in 2008 (see Table 7). According to the survey, Oregon LECs provided local exchange switched services to 910,349 Oregon residential customers. ILECs had 867,010 residential customers or 95.2% of the total, while 43,339 residential customers were served by CLECs.

CLECs' share of residential lines was 5.3 percent in 2008. Oregon LECs supplied a total of 942,043 local switched telephone lines to residential customers. ILECs supplied 94.7 percent or 891,937 residential lines, and the CLECs provided 50,106 residential lines.

ILECs served 94.7 percent of the residential line market in 2008 (versus 95.6 percent in 2007). The "big four" ILECs (CenturyTel, Qwest, United, and Verizon) provided 85.1 percent of total residential lines, compared to 86.5 percent a year earlier. On average, typical residential local phone service is less profitable than typical business service because it costs more on a per line basis to provide service to an individual home than to typically more geographically clustered businesses. About 15 percent of total CLEC lines serve residential customers, while 62 percent of ILEC lines serve residential customers. Most CLEC operations are focused on the more profitable business market.

Overall residential revenues from local exchange switched service in Oregon in 2008 were an estimated $320.4 million as compared with $354.7 million in 2007. Average residential monthly revenue was $29.80 per line for CLECs and $28.26 per line for ILECs.

2. CLEC Provisioning of Switched Service

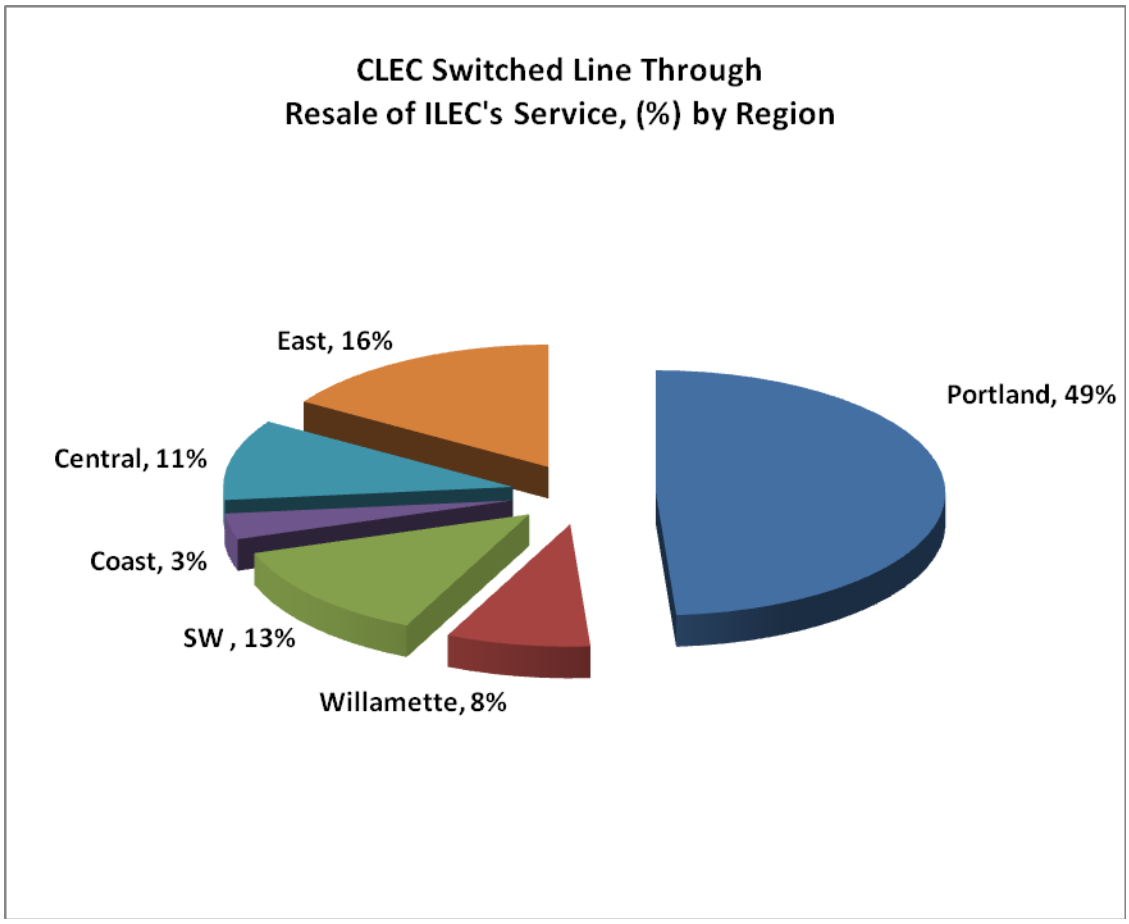
Resellers of ILEC services were 35 of the 59 CLECs (59%) providing local switched service in December 2008. A CLEC reseller buys complete retail services from ILECs, and then resells those services under the CLEC's own name to customers.

A. Facility-Based CLEC

Approximately 46 percent (27 of 59) of CLECs providing local switched service are fully or partially facility-based providers. These fully or partially facility-based CLECs provided 334,274 switched access lines, which was 88.8 percent of total CLECs' lines, and 20.7 percent of all LECs' switched access lines. There were 27 CLEC facilities-based providers identified in the survey. However, not all of these lines were provisioned using facilities owned and operated by CLECs. A facilities-based CLEC typically owns and operates some telecommunications equipment, and also provides resale service obtained from one or more ILECs.

Over 49 percent of resold ILEC service occurred in the Portland area, and 16 percent of resold CLEC service occurred in the East Area (see Figure 6).

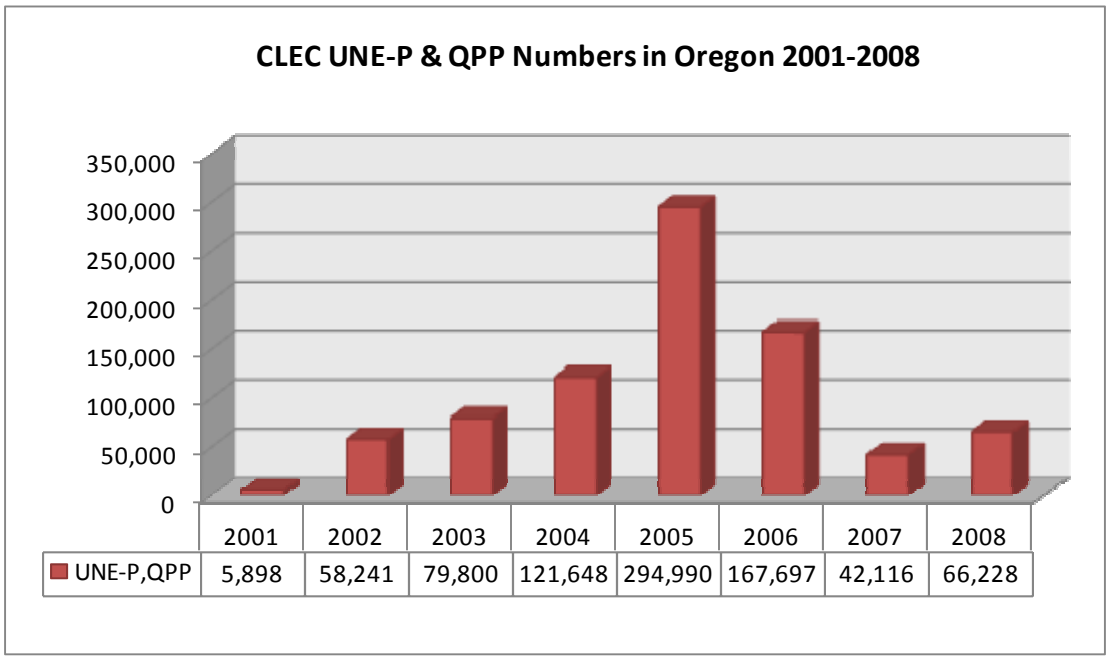
Figure 6. Market Concentration – CLECs Resale of ILECs' Lines in 2008



B. UNE-P CLEC

Thirteen CLECs reported providing switched access lines by purchasing Unbundled Network Elements Platform (UNE-P) or Qwest Platform Plus (QPP) which is UNE-P Equivalent. The UNE-P and QPP numbers were 66,228 (lines) in December 2008, versus 42,116 in 2007 and 167,697 in 2006. Figure 7 below indicates that as Federal Communications Commission's (FCC) policy changed, total UNE-P plus QPP numbers changed correspondingly.

Figure 7. CLEC UNE-P Numbers in Oregon 2001-2008



3. Market Trends in Switched Access Services

CLECs reported 334,274 (or 18.9 percent of all LECs) of 1,771,220 statewide local switched access lines in service at the end of 2008. This represents a 7.9 percent increase in CLEC switched lines during 2008. In comparison, the number of lines served by ILECs decreased by 10.5 percent during the preceding year, from 1,605,911 to 1,436,946 lines.

Figure 8. ILECs' Switched Access Services Market Share: 1998 to 2008

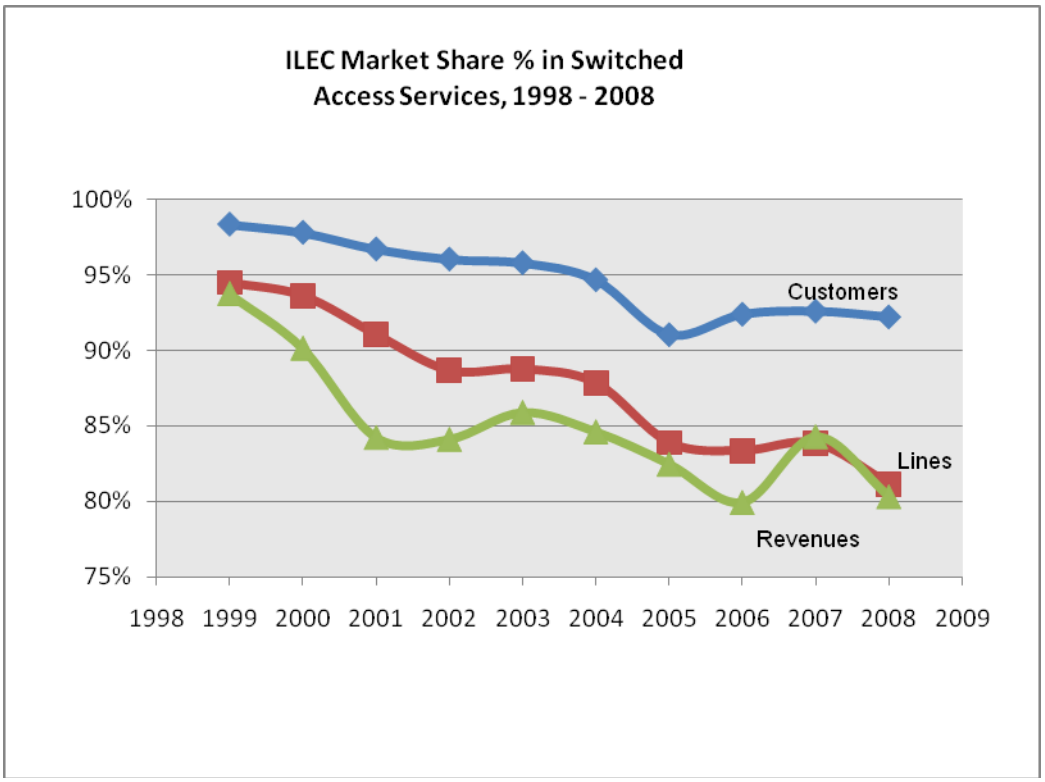


Figure 8 shows the downward trend for ILECs share of switched access services .

ILEC residential revenue was $302 million, which is down from $341 million in 2007. ILEC business revenue decreased 4.4 percent to $217 million from $227 million.

CLEC revenue from the residential market was $17.9 million in 2008, up from $13.7 million in 2007. CLEC revenue from the business market was $117.4 million, which was up 18 percent from $99.5 million in 2007.

Table 8. Trends in Switched Access Lines, 1998 to 2008

Date	ILEC Lines	CLEC Lines	Total	CLEC Share
Dec-98	2,116,322	85,146	2,201,468	3.9%
Dec-99	2,078,678	121,277	2,199,955	5.5%
Dec-00	2,257,594	153,578	2,411,172	6.4%
Dec-01	2,238,640	219,990	2,458,630	8.9%
Dec-02	2,115,892	270,494	2,386,386	11.3%
Dec-03	2,024,882	256,571	2,281,453	11.2%
Dec-04	1,959,459	271,344	2,230,803	12.2%
Dec-05	1,803,832	346,923	2,150,755	16.1%
Dec-06	1,652,900	330,407	1,983,307	16.7%
Dec-07	1,605,911	309,674	1,915,585	16.2%
Dec-08	1,436,946	334,274	1,771,220	18.9%

Figure 9. CLEC Switched Lines

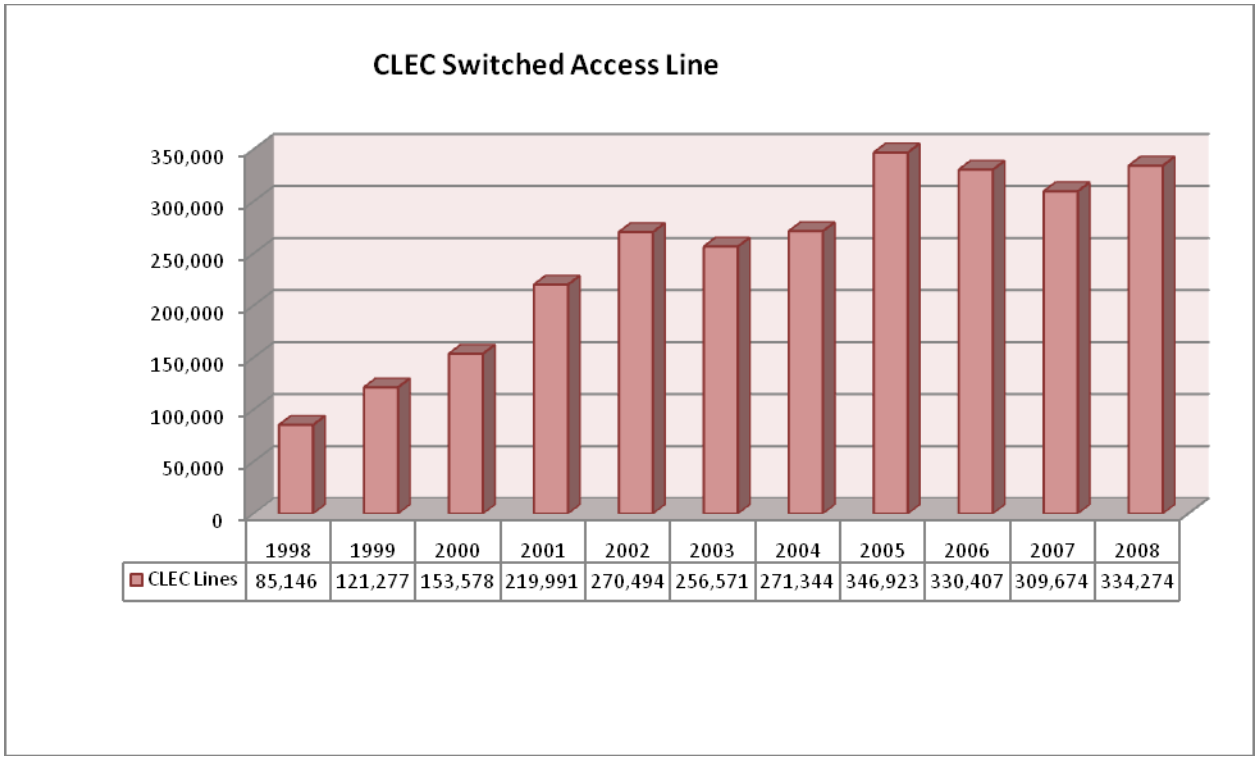
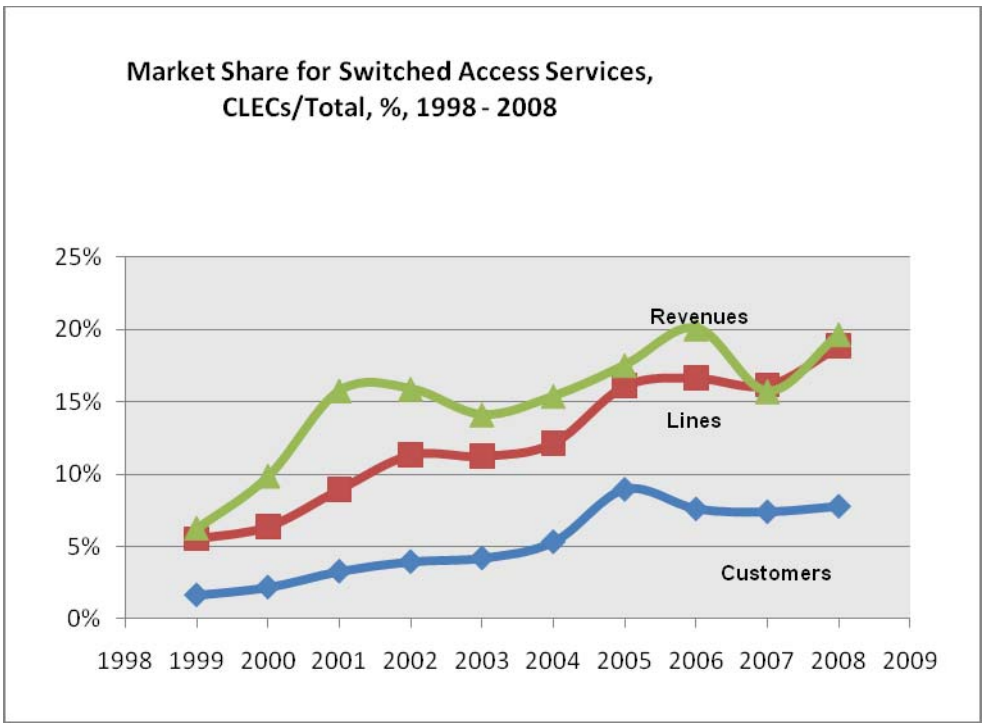


Table 8 and Figure 9 show that CLEC switched access lines increased in 2008 after two consecutive years of decreases. Annual growth in CLEC switched lines averaged 14.7 percent over the 1998-2008 period, from 85,146 lines in 1998 to 334,274 lines in 2008. During the same period, the number of ILEC switched access lines declined by an average of 3.8 percent per year, from 2.1 million lines in 1998 to 1.4 million lines in 2008. The total number of lines has declined by 19.5 percent since 1998. This decline was due to the increased use of cell phones, replacing second lines with DSL, and use of cable service for Internet access.

Figure 10 below shows market growth for CLECs. The CLEC share of switched service revenue was 19.7 percent in 2008 compared to 5 percent market share in 1998. The CLEC share of switched lines increased to 18.9 percent in 2008, from 3.9 percent in 1998. Finally, the CLEC share of customers was up to 7.8 percent in 2008, from 1.0 percent in 1998. The annual increase for CLEC switched access lines over the last 10 years has averaged 14.7 percent.

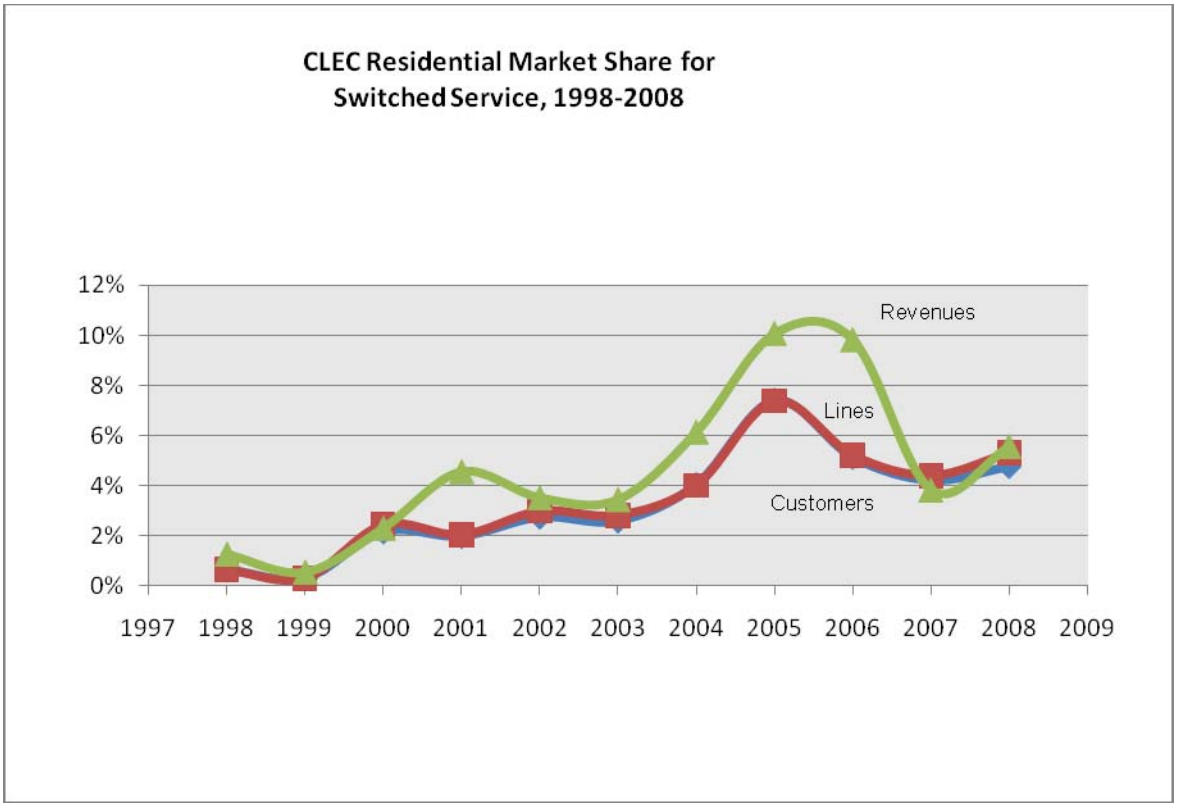
Figure 10. CLECs' Market Shares in Switched Access Services: 1998 to 2008



CLECs' share of residential switched service revenue increased 31.2 percent in 2008 over the prior year.

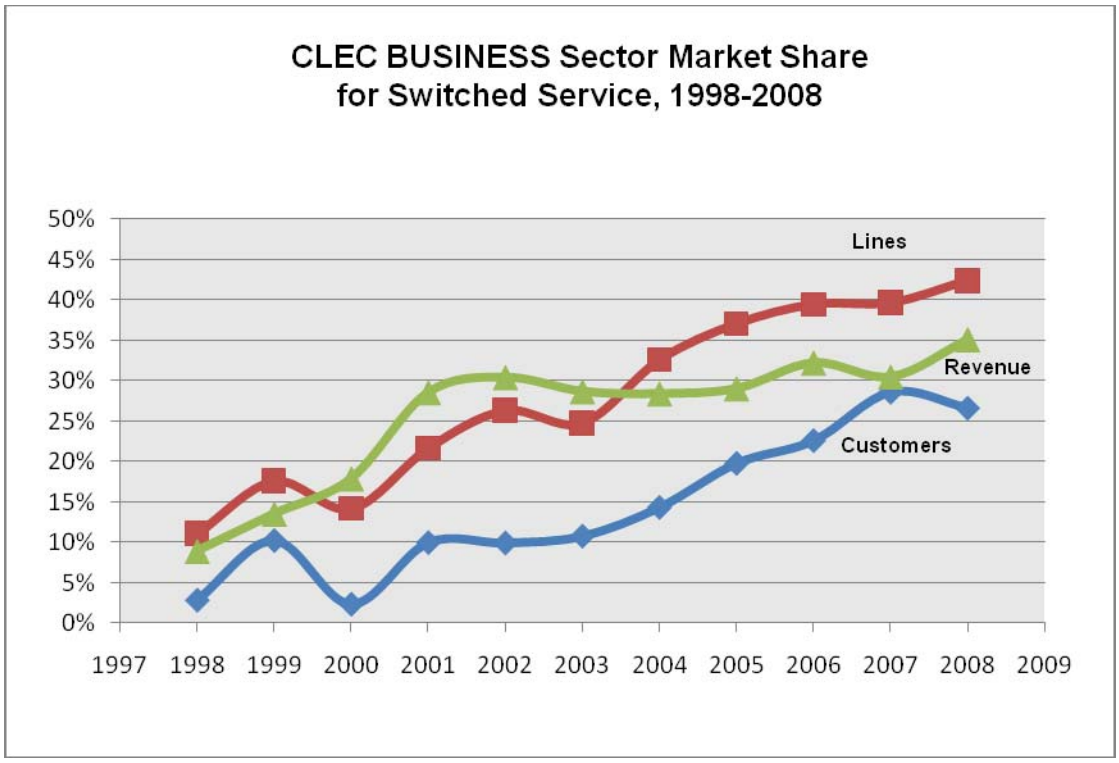
CLECs' share of residential switched service revenue was 5.6 percent in 2008, compared to 1.3 percent in 1998. Over the same period, CLEC's market share for both residential line numbers increased to 5.3 percent from 0.7 percent (see Figure 11).

Figure 11. CLEC Residential Market Shares for Switched Access Services: 1998 to 2008



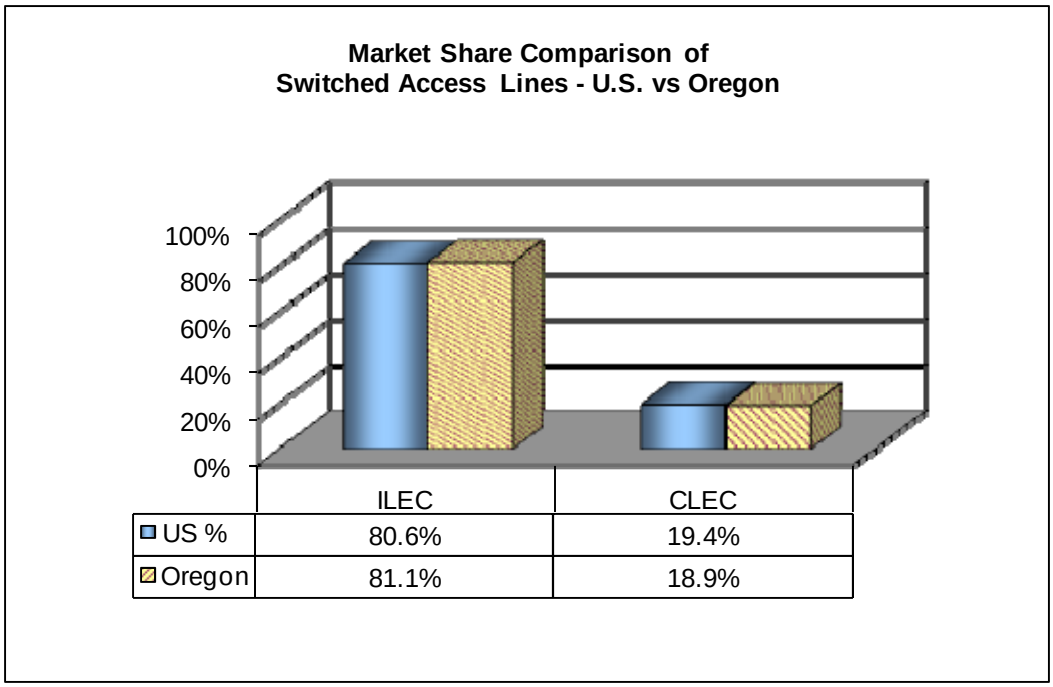
CLECs' share of business switched service revenue increased to 35.1 percent in 2008, from 8.9 percent 10 years ago in 1998. In the same period, the CLEC share of business lines increased to 42.4 percent from 11.1 percent. CLECs' share of business customers increased to 26.6 percent from 2.8 percent over the same period (see Figure 12).

Figure 12. CLEC Business Market Shares for Switched Access Service: 1998-2008



According to FCC News (July 23, 2009), as of June 30, 2008, U.S. end-use customers obtained local telephone service by utilizing approximately 124.6 million ILEC switched access lines (80.6% of total LEC lines) and 30.0 million CLEC switched access lines (19.4% of total). In comparison, Oregon ILECs provided 81.1% of total switched access lines and Oregon CLECs provided 18.9 percent; both are similar to the U.S. figures (see Figure 13).

Figure 13. Market Share Comparison of Switched Access Lines – U.S. vs Oregon



V. High Speed Access Services

1. Market Size and Share

A. Private Line Service

Local exchange private lines are dedicated circuits customers use to transmit information between two or more pre-selected locations within the geography served by a telephone exchange. Local private line services are available in a variety of capacities. The survey distinguished between lower capacity circuits (bandwidth less than 1.544 Megabits per second) and higher capacity circuits (bandwidth of 1.544 Mbps or greater).

Revenue from private line services was 5.9 percent of total 2008 service revenues, with 14.7 percent from DSL and 79.4 percent from switched services.

Thirty-nine CLECs reported they provide local exchange private line services. CLECs share of the private line market ranged from 2.6 percent for lower capacity circuits to 44.1 percent for revenue (see Table 9). The percentage depends on how market share is measured and whether the focus is on lower or higher capacity private line circuits.

The survey measured CLEC market share in three ways: customers, circuits, and revenues.

Table 9. Local Exchange Private Line Services

2008	All LECs	CLECs	ILECs	CLEC Share
Private Line Customers	**8,787**	**2,945**	**5,842**	**33.5%**
Total Private Line Circuits	**33,067**	**4,878**	**28,189**	**14.8%**
Lower Capacity	**17,669**	**465**	**17,204**	**2.6%**
Higher Capacity	**15,398**	**4,413**	**10,985**	**28.7%**
Annual Revenues ($000)	**$54,340**	**$23,971**	**$30,369**	**44.1%**
Annual Revenue per Circuit	**$1,643**	**$4,914**	**$1,077**	

The CLEC share of local private line customers[6] was 33.5 percent, or 2,945 customers,[7] while ILECs provided service to 5,842 customers, or 66.5 percent of the total.

CLECs' market share of all private line circuits[8] was 14.8 percent. The CLEC market share of lower capacity circuits was 2.6 percent, while the CLEC market share for higher capacity circuits was 28.7 percent. Total private line circuits, including lower and higher capacity circuits, numbered 33,067 in 2008.

Table 10. Private Line Service Revenues: 2008

2008	Total	ILECs	CLECs
Shares	**100.0%**	**55.9%**	**44.1%**
$ Million/year	**$54.3**	**$30.4**	**$24.0**

[6] **Customer** – a person or entity that had applied for, been accepted, and was receiving service for a price during the period covered by this report. A customer can have multiple lines; for example, if you send only one bill to a business, governmental agency, or residence, count the bill a one customer.

[7] Note that survey results may overstate the CLECs' share of local private line customers, since local private line customers may buy private line services from more than one carrier at a time. As a result, a CLEC and an ILEC may report the same entity as a private line customer.

[8] **Circuit** – a termination you provide and bill to your customers for private line service. If you provide a circuit that connects two customer locations, and bills the customer for both ends of the circuit, count two terminations. The capacity of a circuit should be determined by the capacity you deliver to the customer at the point of termination, even though the customer may further subdivide that capacity using its own multiplexing or other equipment.

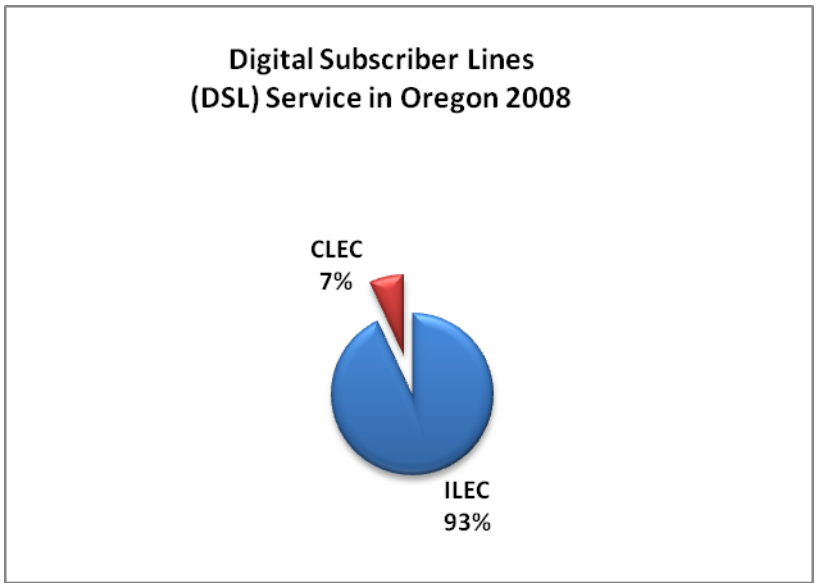
CLECs' share of total local private line service revenues[9] was 44.1 percent (see Table 10). Total revenues from local private line services were an estimated $54.3 million annually. Of the total estimated annual revenues, ILECs received $30.4 million (55.9%), and CLECs the remaining $24 million (44.1%). The CLECs' share of revenues was greater than their share of customers, indicating that CLECs are targeting and serving customers spending more than the average customer.

B. DSL Service

Digital subscriber line (DSL) is a technology that combines two-way voice and data transmissions at very high speeds over normal telephone lines. The total number of DSL in Oregon in 2008 was 378,118, which is about the same as 2007. Ninety-three (93%) percent of DSL was provided by ILECs and 7 percent was provided by CLECs (see Figure 14). Revenues from DSL were $136 million in 2008, up 18.5 percent from 2007.

[9] **Revenues** – the cash inflows or equivalents from your operations during the year.
Exclude loan proceeds, shareholder contributions, and taxes that you billed to customers.
Include regulated and nonregulated charges; federal and state charges; federal and Oregon universal service end-user surcharges and distributions; charges for switched lines, local usage, extended area service, repair and maintenance services, directory listing ser-vices, and add-on features such as call waiting, voice messaging, and caller identification; and charges for private line circuits and add-on capabilities such as multiplexing, conditioning, and bridging.

Figure 14. Oregon Digital Subscriber Lines (DSL)



2. CLEC Provisioning of Private Line Circuits

Nineteen (19) CLECs provided private line services by reselling ILEC services. Nine (9) CLECs provided private line service by reselling services of other CLECs. Most of this resale activity was to business customers in the Portland Metropolitan and Willamette Valley areas.

3. Market Trends in Local Private Line and DSL Services

Technological change is the driving force in the telecommunications industry. Many different technologies and types of networks can provide voice telephone service, with new ones seeming to arrive every year. Customers have replaced the relatively narrow bandwidth available using traditional modems and conventional, "plain old telephone service" lines with alternatives having much greater bandwidth, such as cable modems and cable facilities, digital subscriber lines (DSL), T-1 lines,[10] satellite data service, fixed or mobile wireless facilities, and services having transmission paths entirely over fiber optic cable.

The percentage of Oregon customers (residential and business) having high-speed digital access was 20.6 percent as measured by revenue. Oregon's 20.6 percent for high-speed access services consists of 5.9 percent private line service and 14.7 percent DSL services.

[10] T-1 (also known as Digital Service 1, or DS1) is a private line service having a theoretical bandwidth of 1.544 Megabits per second.

VI. Market Segments by Region and Type of Service

The survey identified six geographic regions within Oregon. The regions are based on clusters of ILEC local exchange serving areas (see Figure 15). The regions are: Portland Metropolitan,[11] Willamette Valley,[12] Southwest Interior,[13] Coast,[14] Central,[15] and East.[16]

[11] The **"Portland Metropolitan"** region consists of the following exchanges: Aurora, Beavercreek, Beaverton, Burlington, Canby, Carlton, Charbonneau, Colton, Corbett, Estacada, Forest Grove, Gresham, Hillsboro, Hoodland, Lake Oswego, Molalla, Newberg, North Plains, Oak Grove-Milwaukie, Oregon City, Portland, Redland, Sandy, Scappoose, Scholls, Sherwood, Stafford, Sunnyside, Tigard, Vernonia, Woodburn-Hubbard, and Yamhill.

[12] The **"Willamette Valley"** region consists of the following exchanges: Albany, Alsea, Amity, Aumsville-Turner, Bellfountain, Blodgett, Blue River, Brownsville, Clatskanie, Corvallis, Cottage Grove, Creswell, Dallas, Dayton, Deadwood, Detroit, Drain, Eugene-Springfield, Falls City, Gervais, Government Camp, Grand Island, Grand Ronde, Halsey, Harlan, Harrisburg, Horton, Independence-Monmouth, Jefferson, Junction City, Leaburg, Lebanon, Lobster Valley, Lowell, Lyons, Marcola, McMinnville, Mill City, Monitor, Monroe, Mt. Angel, Murphy-Provolt, Oakridge, Philomath, Rainier, Salem, Scio, Shedd, Sheridan, Silverton, St. Helens, St. Paul, Stayton, Summit, Sweet Home, Triangle Lake, Veneta, and Willamina.

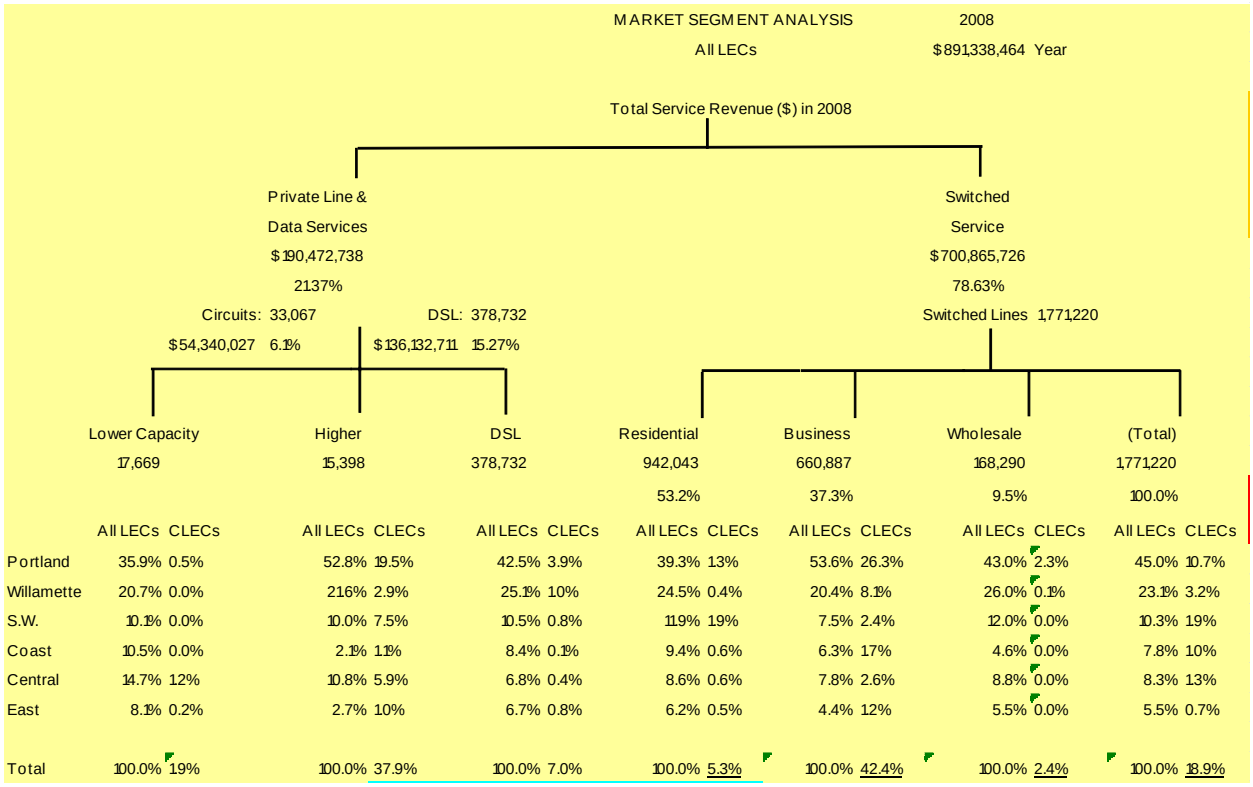
[13] The **"Southwest Interior"** region consists of the following exchanges: Ashland, Azalea, Butte Falls, Camas Valley, Canyonville, Cave Junction, Central Point, Crater Lake, Days Creek, Diamond Lake, Elkton, Fish Lake, Glendale, Glide, Gold Hill, Grants Pass, Jacksonville, Medford, Myrtle Creek, North Umpqua, Oakland-Sutherlin, O'Brien, Phoenix-Talent, Prospect, Riddle, Rogue River, Roseburg, Selma, Shady Cove, White City, Wolf Creek, and Yoncalla.

[14] The **"Coast"** region consists of the following exchanges: Ash Valley, Astoria, Bandon, Bay City, Beaver, Brookings, Cannon Beach, Chitwood, Cloverdale, Coos Bay-North Bend, Coquille, Depoe Bay, Florence, Garibaldi, Gleneden Beach, Gold Beach, Jewell, Knappa, Lakeside, Langlois, Lincoln City, Mapleton, Myrtle Point, Nehalem, Newport, Pacific City, Port Orford, Powers, Reedsport, Rockaway, Scottsburg, Seaside, Siletz, South Beach, Tidewater, Tillamook, Toledo, Waldport, Warrenton, Westport, and Yachats.

[15] The **"Central"** region consists of the following exchanges: Antelope, Arlington, Bend, Bonanza, Bly, Camp Sherman, Cascade Locks, Chemult, Chiloquin, Condon, Culver, Dufur, Fort Klamath, Fossil, Gilchrist, Grass Valley, Hood River, Klamath Falls, Lakeview, La Pine, Madras, Malin, Maupin, Merrill, Mitchell, Moro, Mosier, Odell, Paisley, Parkdale, Paulina, Pine Grove, Prineville, Redmond, Rocky Point, Rufus, Silver Lake, Sprague River, Sisters, The Dalles, Tygh Valley, Wamic, and Wasco.

[16] The **"East"** region consists of the following exchanges: Adrian, Athena-Weston, Baker, Bates, Boardman, Burns, Cove, Dayville, Durkee, Echo, Elgin, Enterprise, Flora-Troy, Granite, Haines, Halfway, Harney, Harper, Helix, Heppner, Hereford-Unity, Hermiston, Huntington, Imbler, Ione, John Day, Jordan Valley, Joseph, Juntura, La Grande, Lexington, Long Creek, Lostine, Meacham, Medical Springs, Milton-Freewater, Monument, Mt. Vernon, North Powder, Nyssa, Ontario, Oregon Slope, Pendleton, Pilot Rock, Prairie City, Richland, Ridgeview, Seneca, Spray, Stanfield, Starkey, Sumpter, Ukiah, Umatilla, Union, Vale, Walla Walla (Stateline), and Wallowa.

Figure 15. Local Exchange Carriers Market Segments and Shares



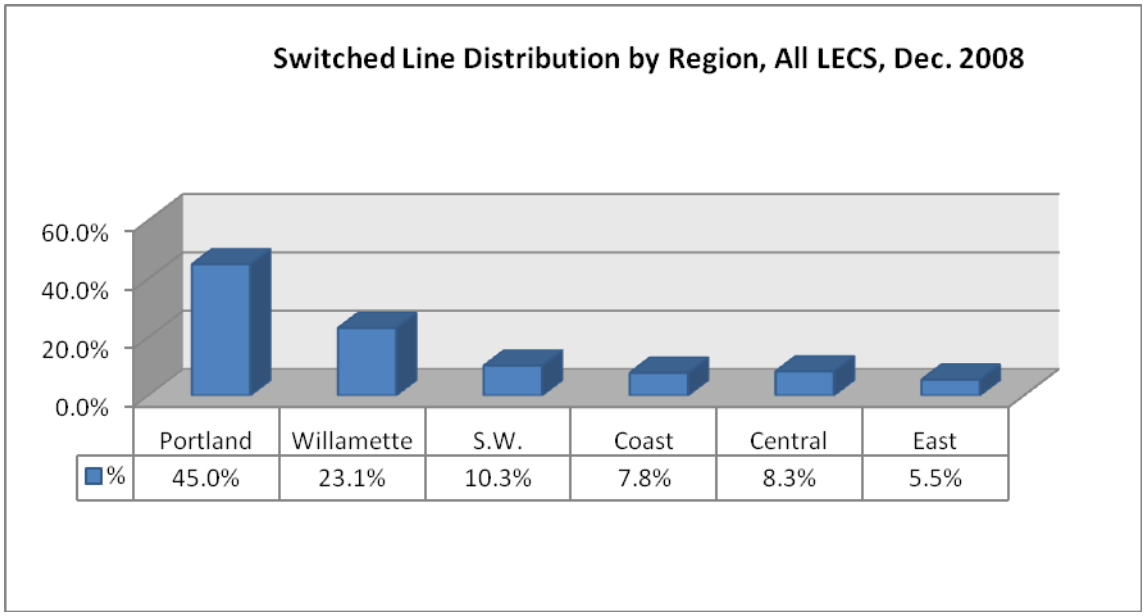
	All LECs	CLECs	All LECs	CLECs	All LECs	CLECs	All LECs	CLECs	All LECs	CLECs	All LECs	CLECs	All LECs	CLECs
Portland	35.9%	0.5%	52.8%	19.5%	42.5%	3.9%	39.3%	1.3%	53.6%	26.3%	43.0%	2.3%	45.0%	10.7%
Willamette	20.7%	0.0%	21.6%	2.9%	25.1%	1.0%	24.5%	0.4%	20.4%	8.1%	26.0%	0.1%	23.1%	3.2%
S.W.	10.1%	0.0%	10.0%	7.5%	10.5%	0.8%	11.9%	1.9%	7.5%	2.4%	12.0%	0.0%	10.3%	1.9%
Coast	10.5%	0.0%	2.1%	1.1%	8.4%	0.1%	9.4%	0.6%	6.3%	1.7%	4.6%	0.0%	7.8%	1.0%
Central	14.7%	1.2%	10.8%	5.9%	6.8%	0.4%	8.6%	0.6%	7.8%	2.6%	8.8%	0.0%	8.3%	1.3%
East	8.1%	0.2%	2.7%	1.0%	6.7%	0.8%	6.2%	0.5%	4.4%	1.2%	5.5%	0.0%	5.5%	0.7%
Total	100.0%	1.9%	100.0%	37.9%	100.0%	7.0%	100.0%	5.3%	100.0%	42.4%	100.0%	2.4%	100.0%	18.9%

1. Market Segments by Regions

A. Switched Services by Region

The survey asked each LEC to report the number of switched local exchange lines it was supplying to customers in each region. Both ILECs and CLECs reported customers in all six regions. The Portland Metropolitan region, the most populous area in the state, continues to be the largest regional market. It accounted for 45.2 percent (see Figure 16) of all retail local exchange switched lines in the state. Second was the Willamette Valley region, with 23.8 percent of the lines. The other four regions collectively accounted for less than a third of the state's lines: Southwest Interior (9.9%), Central (8.2%), Coast (7.7%), and East (5.3%).

Figure 16. Oregon All LECs Switched Lines by Region

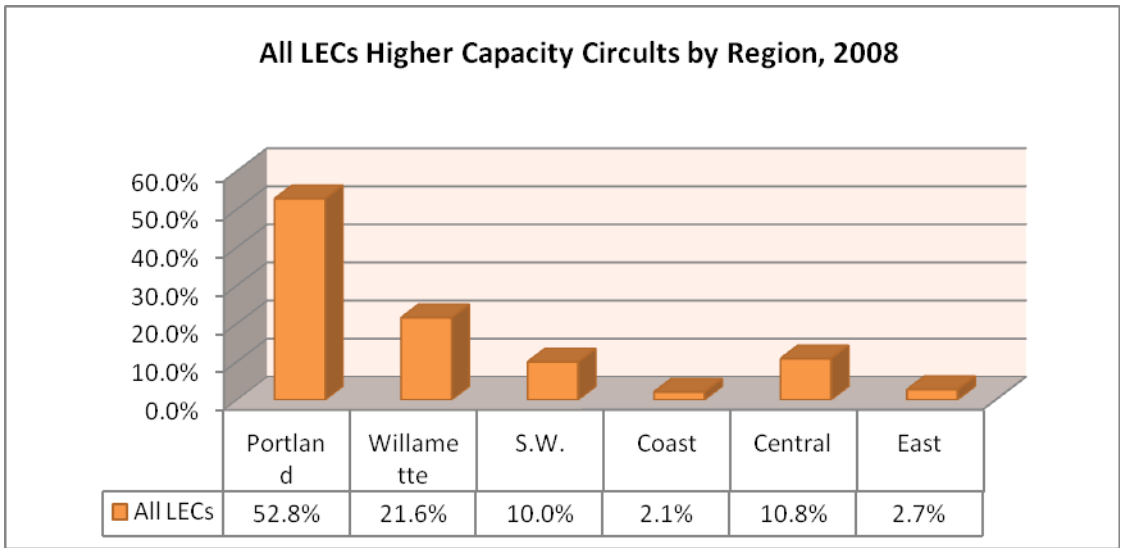


Survey responses indicate that CLECs provided competitive local switched service in all six regions of the state. Competitive entry is highest in the Portland Metropolitan region. Statewide, CLECs had a 18.9 percent share of switched local exchange lines. Forty-five (45%) percent of CLEC switched lines are in the Portland Metropolitan region, followed by the Willamette Valley with 23.1 percent, then the Southwest Interior (10.3%), Central (8.3%), Coast (7.8%) and East (5.5%) regions.

For the Residential market, CLECs had 5.3 percent of lines in the state in 2008, and 37 percent of CLEC residential lines were in the Portland Metro region.

In the Business sector, CLECs had 42.4 percent of lines in the state, and 53.6 percent of all CLEC business switched lines were in the Portland Metro region (see Figure 17).

Figure 17. Distribution of CLEC Business Lines by Region

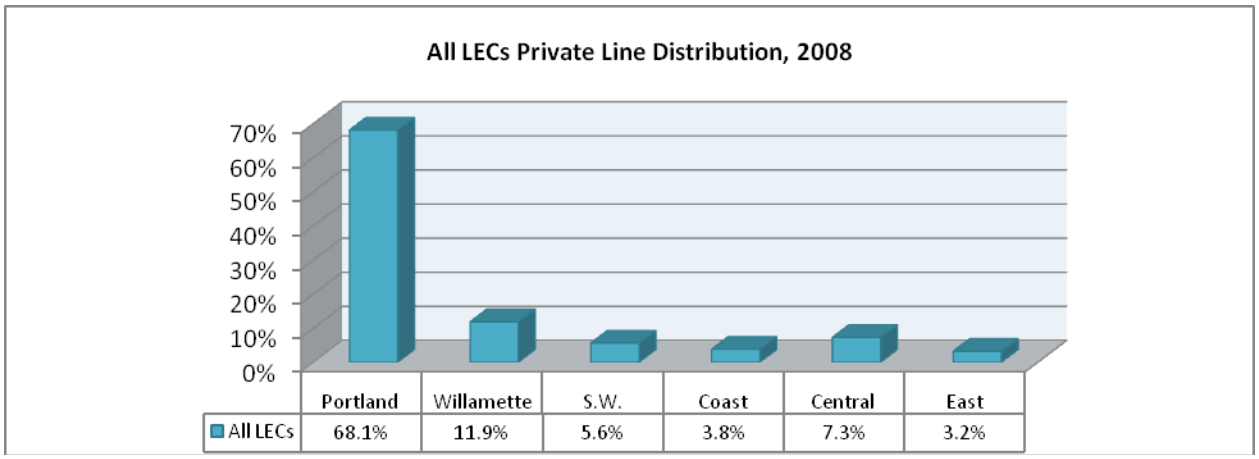


B. Private Line Service by Region

A private line is a dedicated, non-switched link from one or more customer-specified locations to one or more customer-specified locations. A circuit is a complete electrical path providing one- or two-way communication between two points comprised of associated send and receive channels. Capacity is determined by the highest data transmission rate in either direction.

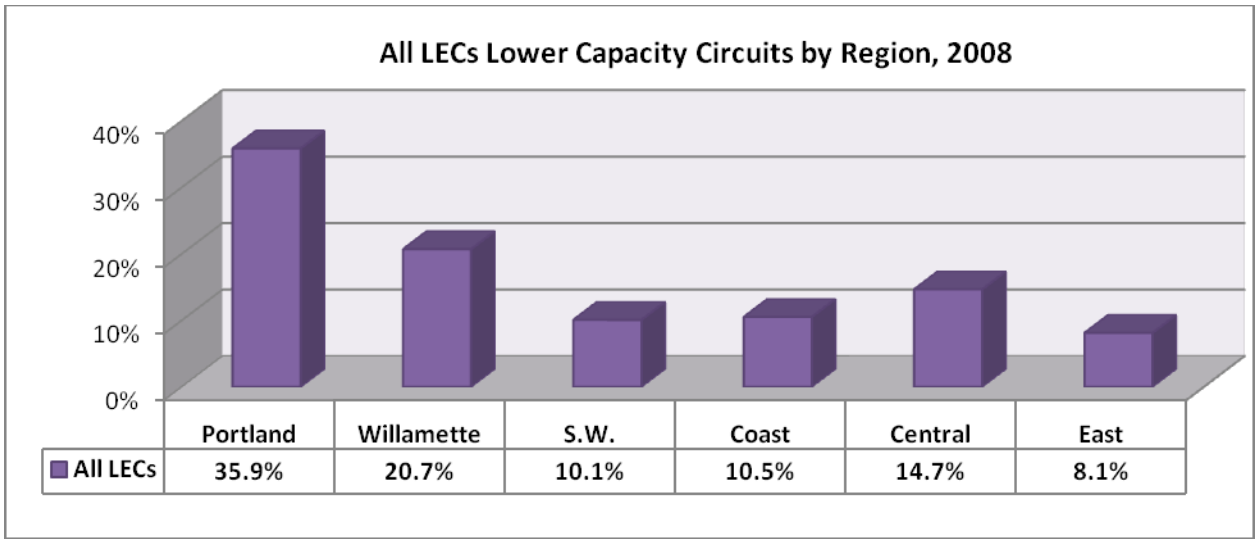
The Portland Metropolitan region is the largest regional private line market, with 68.1 percent (see Figure 18) of all retail private line circuits in the state. The second largest was the Willamette Valley, with 11.9 percent of private line circuits. The other four regions together accounted for 20 percent of the state's private line circuits: Central (7.3%), Southwest Interior (5.6%), East (3.2%), and Coast (3.8%).

Figure 18. Oregon Private Line Service by Region: 2008



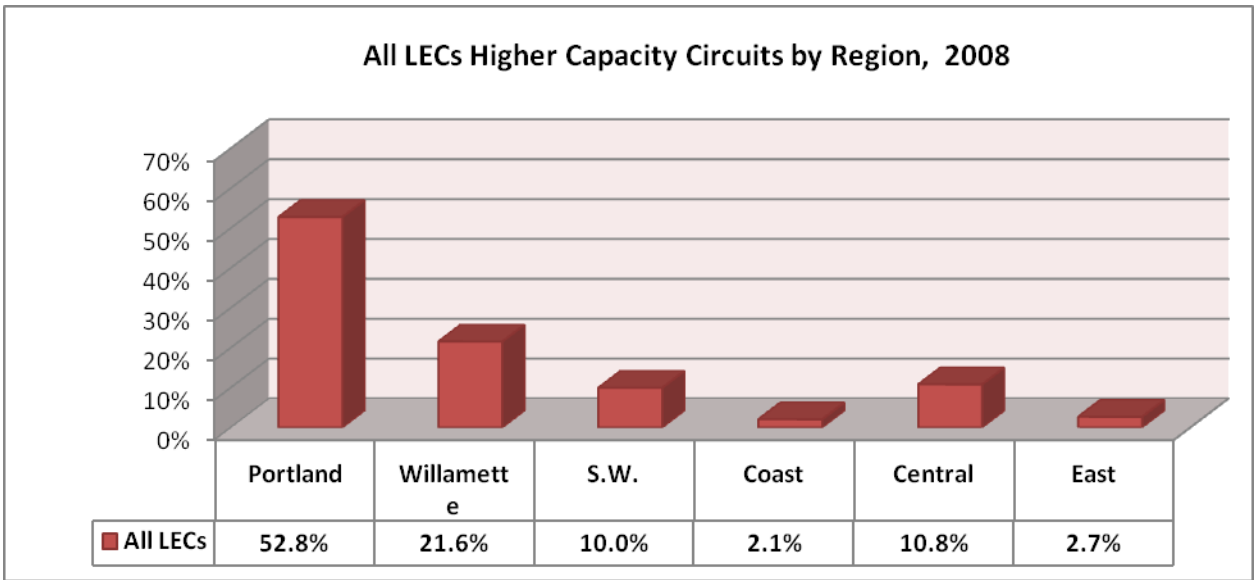
Of the state's 33,067 local exchange private line circuits, most (53.4 percent) were in the lower capacity category. The Portland Metropolitan region was the largest market for lower capacity circuits, with 35.9 percent (see Figure 19) of the lower capacity private line circuits in the state. The second largest market was the Willamette Valley region with 20.7 percent of lower capacity private line circuits, followed by the Central (14.7%), Coast (10.5%), Southwest Interior (10.1%), and East (8.1%) regions.

Figure 19. Lower Capacity Private Line Circuits by Region: 2008



Higher capacity private line circuits accounted for 46.6 percent of the state's total private line circuits. In December 2008, the market for higher capacity private line circuits was concentrated in the Portland Metropolitan region, with 52.8 percent of the state's total (see Figure 20). The remaining five regions had 47.2 percent of the state's higher capacity private line circuits.

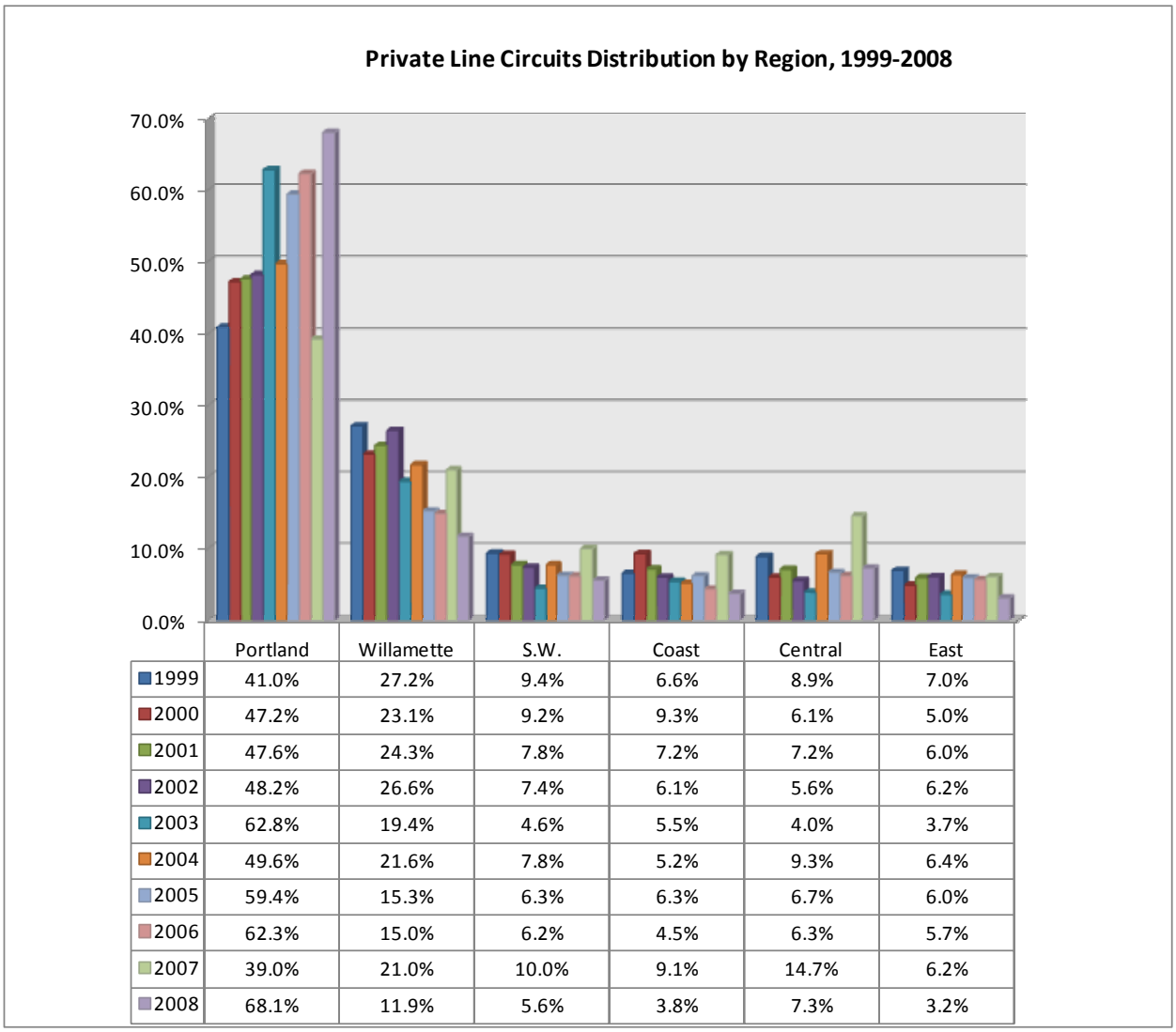
Figure 20. Oregon Higher Capacity Circuits by Region: 2008



CLECs' share of lower capacity circuits was 2.6 percent statewide. CLECs' share of higher capacity private line circuits was 29 percent statewide.

The regional distribution of private lines has fluctuated over the last several years as indicated in Figure 21. The Portland Metro region's share of private line circuits was 68% of the state's total in 2008 (see Figure 21).

Figure 21. Private Line Circuits Distribution: 1999 through 2008

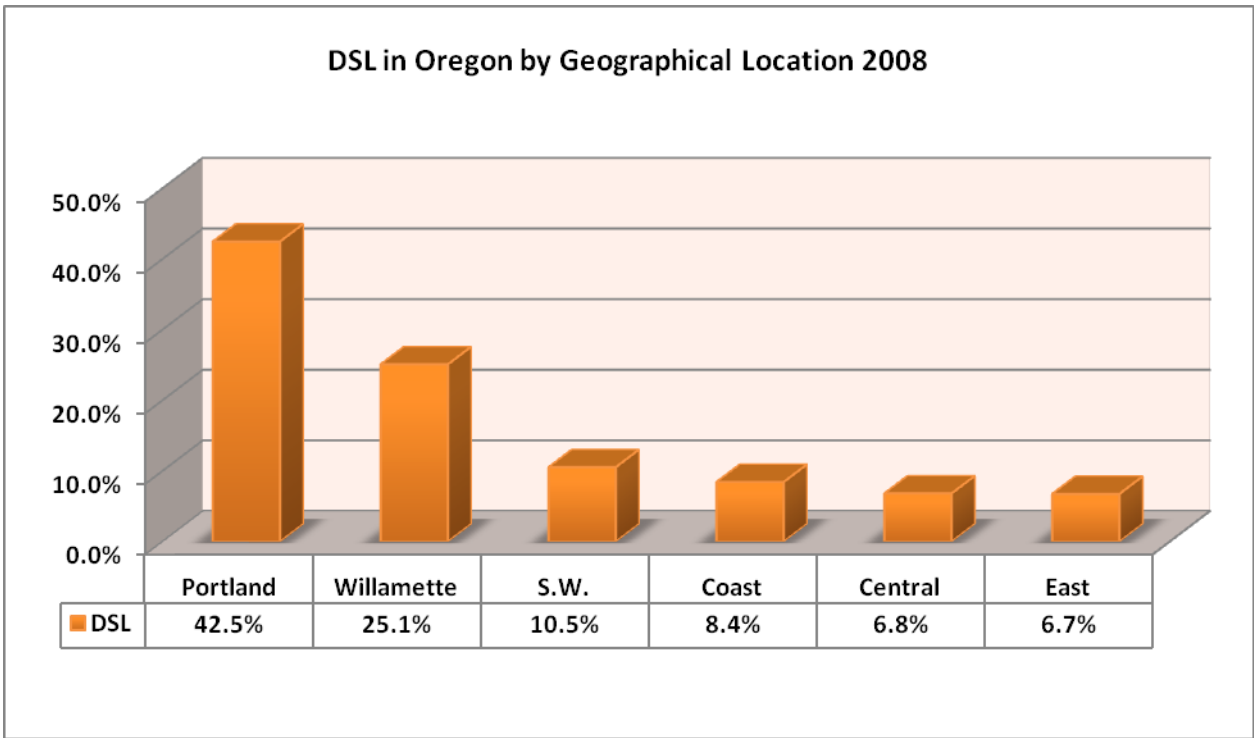


	Portland	Willamette	S.W.	Coast	Central	East
1999	41.0%	27.2%	9.4%	6.6%	8.9%	7.0%
2000	47.2%	23.1%	9.2%	9.3%	6.1%	5.0%
2001	47.6%	24.3%	7.8%	7.2%	7.2%	6.0%
2002	48.2%	26.6%	7.4%	6.1%	5.6%	6.2%
2003	62.8%	19.4%	4.6%	5.5%	4.0%	3.7%
2004	49.6%	21.6%	7.8%	5.2%	9.3%	6.4%
2005	59.4%	15.3%	6.3%	6.3%	6.7%	6.0%
2006	62.3%	15.0%	6.2%	4.5%	6.3%	5.7%
2007	39.0%	21.0%	10.0%	9.1%	14.7%	6.2%
2008	68.1%	11.9%	5.6%	3.8%	7.3%	3.2%

C. DSL Service by Region

DSL (refers to all types of digital subscriber lines) service was provided by 378,118 lines in 2008 and generated $136.1 million in revenue. Of all DSL, 42.5 percent was in the Portland Metropolitan region (see Figure 22), followed by the Willamette Valley (25.1%), Southwest Interior (10.5%), Coast (8.4%), Central (6.8%) and East (6.7%) regions.

Figure 22. Oregon DSL by Region

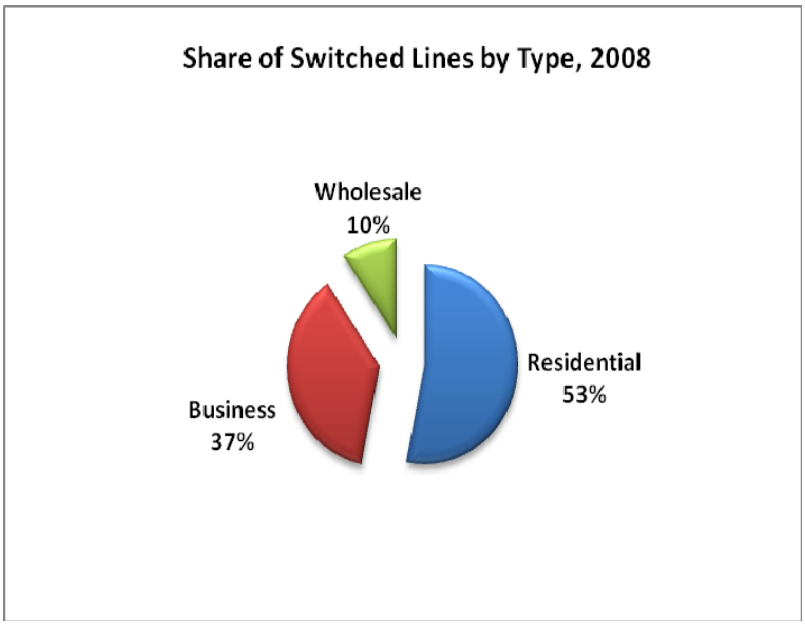


2. Customer Markets by Type of Service

A. Switched Services

The survey grouped customers into three market: residential, business, and wholesale. Fifty-three percent of switched service lines were in the residential market, 37 percent were in the business market, and 10 percent were wholesale (see Figure 23).

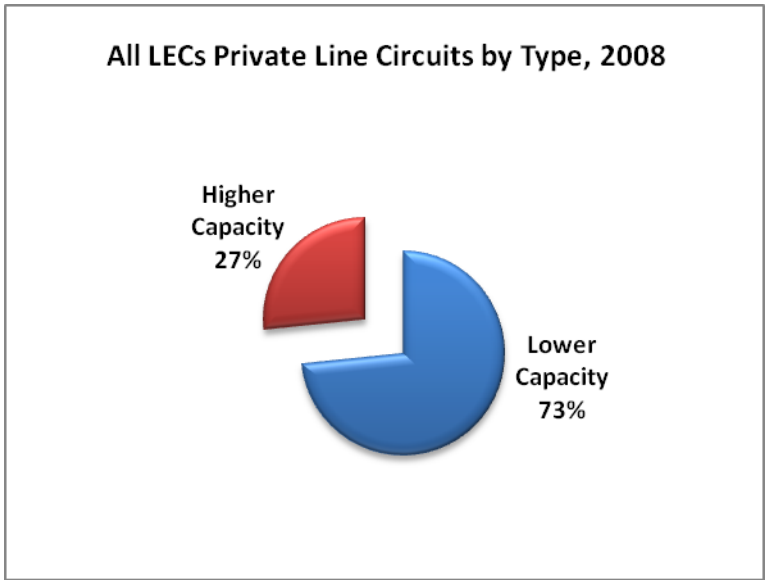
Figure 23. 2008 Switched Service Lines by Market



B. Private Line

Figure 24 shows that 73 percent of private line circuits were lower capacity, and that 27 percent were higher capacity.

Figure 24. Oregon Private Line Circuits by Types



C. DSL

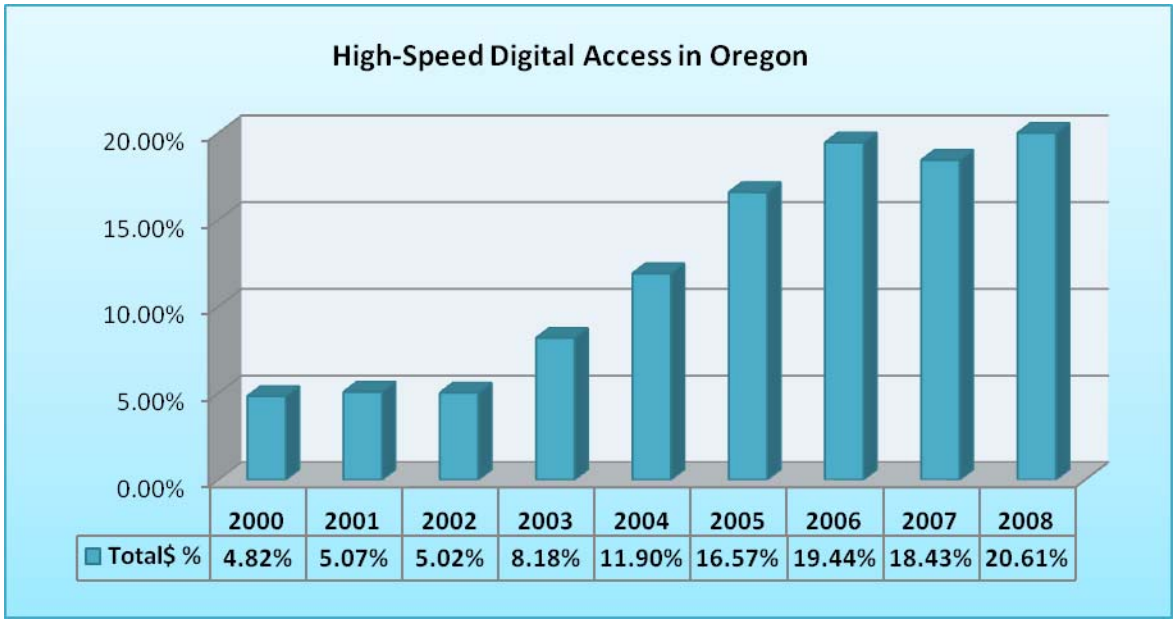
DSL service was provided on 378,118 residential and business lines and accounted for $136.1 million of revenue. Average DSL revenue per month was $30.00 per line.

Total High-Speed Digital Access in Oregon

High-speed digital access accounted for 21.4 percent of total LEC revenue in 2008. This was an increase from 18.3 percent in 2007. The 21.4 percent revenue figure for high-speed access services consists of 6.1 percent from private line services, and 15.3 percent from DSL.

High-speed digital access used to be a dream for most Oregonians. Approximately 4.8 percent of Oregon customers (residential and business) had Internet access in 2000 at a higher bandwidth than that available using a conventional modem over traditional telephone lines. This was comparable to the nationwide penetration of less than 5 percent in late 2000. The market share of high-speed digital access was low at the time because of its limited availability in Oregon. Eight years later the high-speed digital access penetration in Oregon was over 20 percent (see Figure 25 below).

Figure 25. Trend of High-Speed Digital Access in Oregon



VII. Business Plans and Competition

1. Capital Expenditures

Capital expenditures are funds spent to acquire or upgrade physical assets such as switches and fiber optic cable. The survey asked for information on investment in capital assets (plant and equipment). Capital expenditures in 2008 for local exchange service in Oregon were estimated at $156.2 million, which equates to 17.5 percent of total revenue ($891.3million). (See Table 11)

Of the 235 certified CLECs, 152 reported some level of capital expenditures in 2008, with 63 percent (118 of 186) having made capital expenditures totaling less than $10,000. Total 2008 CLEC capital expenditures were $51.8 million. CLECs' total 2008 capital investment represented 29.4 percent of CLECs' revenue ($175.8 million).

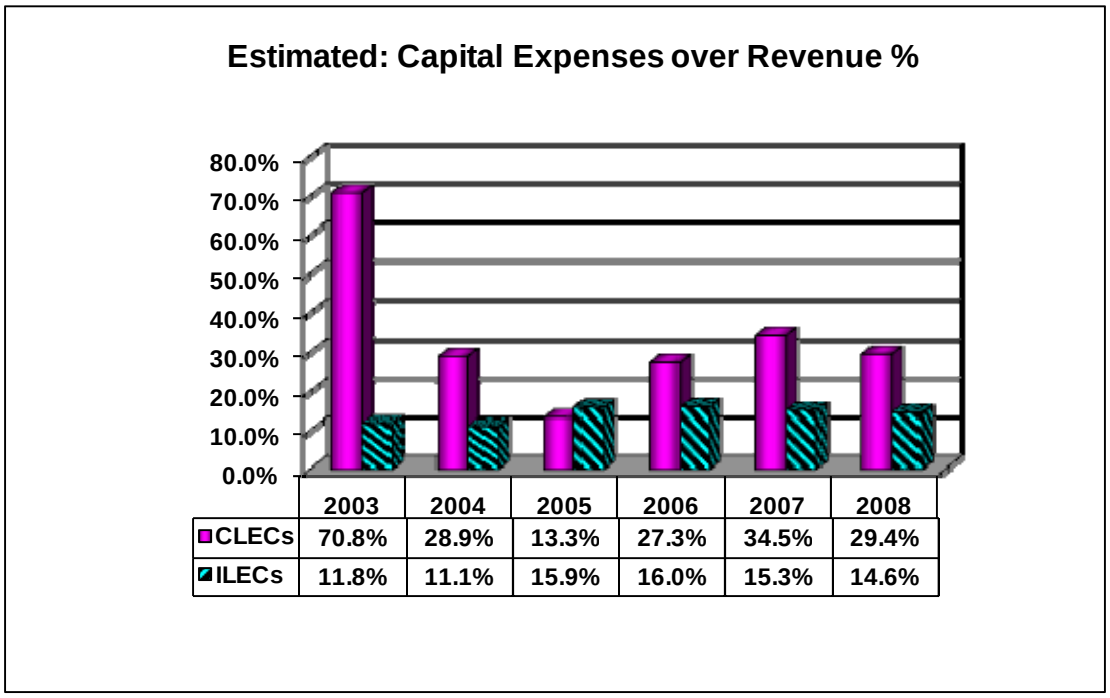
All 34 certified ILECs reported capital expenditures in 2008. Total ILEC capital expenditures were $104.4 million, which equates to 14.6 percent of ILECs' 2008 revenue ($715.6 million).

Table 11. 2008 Capital Expenditures for Local Exchange Service

Capital Expenditures	ILECs	CLECs	All LECs
Less than $10,000	0	118	118
$10,000-50,000	3	5	8
$50,001-100,000	1	4	5
$100,001-1,000,000	15	15	30
$1,000,001-10,000,000	12	10	22
More than $10,000,000	3	0	3
# of LECs making Capital Expenditures	34	152	186
Estimated Expenditures ($million)	$104.4	$51.8	$156.2
Revenues ($million)	$715.6	$175.8	$891.3
Investment as % of Revenue	14.6%	29.4%	17.5%

Figure 26 shows estimated capital expenditures as a percent of revenues. For example, CLECs' 2003 Oregon capital expenditures for local exchange service (not for other services such as wireless or long distance) equated to 70.8% of Oregon revenues. For ILECs this value was 11.8%. In 2005, CLECs' expenditure/revenue rate dropped to 13.3%, and ILECs' rate increased to 15.8%. For 2008, CLECs' rate increased to 29.4%, while the rate for ILECs was approximately the same 15-16% rate of the three prior years.

Figure 26. Estimated Capital Expenditures as a Percent of Revenue



	2003	2004	2005	2006	2007	2008
CLECs	70.8%	28.9%	13.3%	27.3%	34.5%	29.4%
ILECs	11.8%	11.1%	15.9%	16.0%	15.3%	14.6%

2. Competition for Residential Market

The survey asked all local exchange carriers "What do you believe are the reasons that you do not have a bigger share of Oregon's residential market (check all that apply)?" Sixteen of 34 ILECs (47%) noted that cell phone usage has reduced the demand for wireline (including second-line) services (see Table 12), and eight ILECs said they were restrained by geographical location, which made residential competition difficult or expensive.

Forty of the 183 responding CLECs said they could not compete on price (compared to 29 saying this in 2007), 24 said they could not compete on facilities, 21 said that the incumbent local exchange carrier has name familiarity, and 21 said that they did not have enough capacity. Since CLECs' operations focus principally on business customers, only 23 of 183 CLECs (12.6%) responded that cell phone usage has decreased the demand for residential wireline services, and 22 CLECs considered geographic location made residential competition difficult or expensive. The percentage of responding CLECs identifying each of the above reasons for not having a higher share of the residential market has remained about the same over the six year period that this question has been asked.

Table 12. Residential Market Competition: 2008

Reason	# of ILECs	# of CLECs
Cannot compete on price	4	40
Cannot compete on facilities	1	24
ILEC has name familiarity	0	21
Do not have enough capacity	1	21
Cell phone decreased the wireline demand	16	23
Hard to compete due to location	8	22
Other:	15	90

Of the 90 CLECs who checked the "other" option, most stated they focused their activity on business customers or did not provide residential local exchange service in 2008. However, some of these 90 CLECs provided other reasons why they did not have a bigger share of Oregon's residential market. Comments of these respondents included the following:

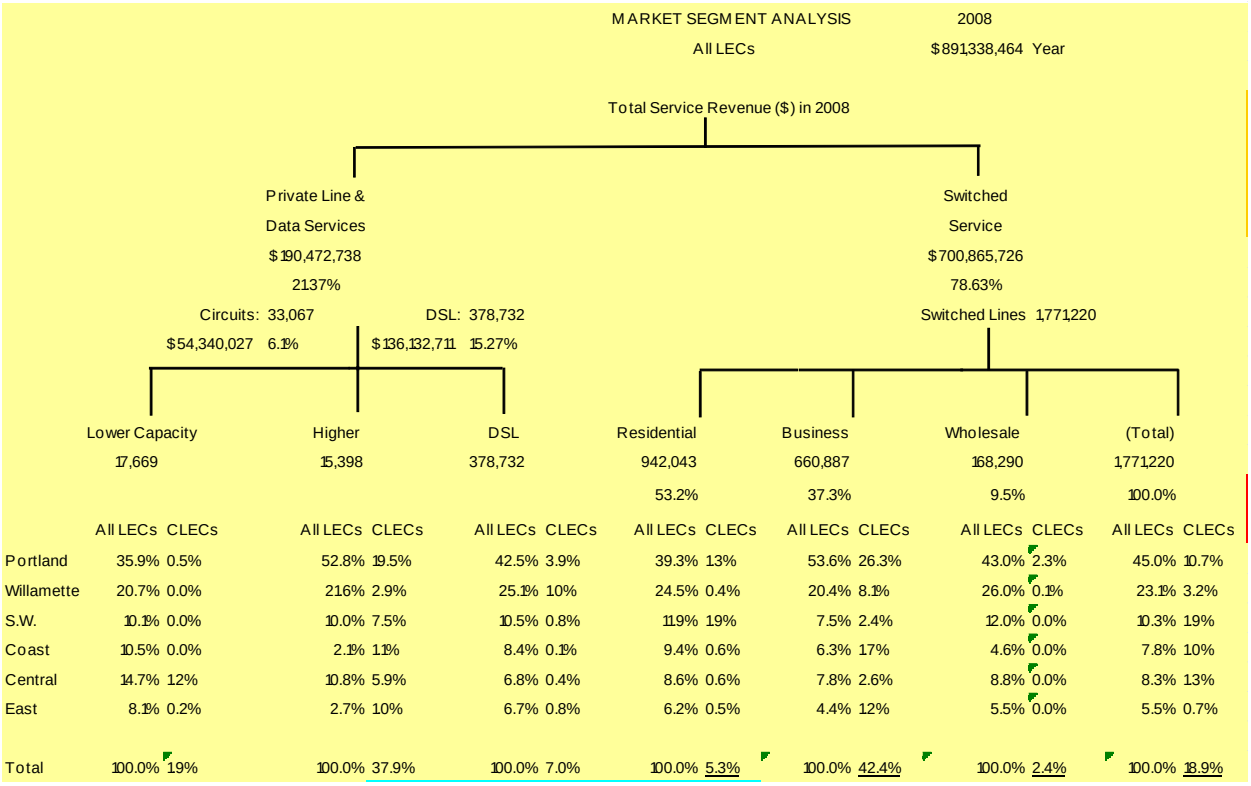
- Does not provide residential local exchange service due to “Complex Franchise Requirements and Excessive Property Taxation”.
- Does not provide residential local exchange service due to “Lack of marketing capabilities in the state of Oregon”.
- Does not provide residential local exchange service because “Qwest QPP cost in Rate Group 2 is $29.99, Residential Line retail is $13.80, Qwest lowered resale discount from 22% to 17%.”
- Does not provide residential local exchange service because “Rules regarding ILEC obligations to CLEC's are softening too much. With lines sharing and dark fiber no longer available – ILECs have a huge advantage in broadband development.”
- Does not provide residential local exchange service because “Qwest sells basic residential phone lines to retail customers at $12.80. Our QLSP price is $17.24 + local usage.”
- Not interested in serving Oregon's residential market; only interested in broadband service within the City.

- Company “ceased provision of local services because UNE-P price increases adversely affected our ability to competitively price our offerings.”
- Company’s “current business plan is to continue serving Oregon business customers with high speed broadband/data services.”
- Company provides residential services through wholesale partners and is dependent on the marketing success of those partners.
- Company “provides DSL and VoIP services to wholesalers, who provide end-user services to their customers.”
- Company provides bundled calling plans on a leased facilities-based platform.
- Company is not pursuing the residential market in Oregon at this time.
- Company's business plan does not involve targeting the residential market.
- Respondent is only interested in the reselling of capacity for the purposes of economic development.
- Company currently only provides to business customers.
- The respondent is not trying to solicit residential customers.
- Business plan focuses on business customers and small carriers.
- Company's residential services are provided through wholesale partners and company is dependent on the marketing success of those partners.
- Cooperative markets primarily to "business" customers
- Do not want Residential customers

VIII. Conclusions

In 2008 Oregon's local telecommunications market was an $891 million industry, comprised of 1.77 million switched lines, 33,067 private line circuits and 378,732 DSL. Industry wide revenues decreased $7 million from 2007. The number of switched lines served is now lower than when this survey was first taken in 1998, reflecting the competitive impact from the cellular phone, cable, and high-speed internet access services. See summary Figure below.

Figure 27. Local Exchange Carriers' Market Segments and Shares



	All LECs	CLECs	All LECs	CLECs	All LECs	CLECs	All LECs	CLECs	All LECs	CLECs	All LECs	CLECs	All LECs	CLECs
Portland	35.9%	0.5%	52.8%	19.5%	42.5%	3.9%	39.3%	1.3%	53.6%	26.3%	43.0%	2.3%	45.0%	10.7%
Willamette	20.7%	0.0%	21.6%	2.9%	25.1%	1.0%	24.5%	0.4%	20.4%	8.1%	26.0%	0.1%	23.1%	3.2%
S.W.	10.1%	0.0%	10.0%	7.5%	10.5%	0.8%	11.9%	1.9%	7.5%	2.4%	12.0%	0.0%	10.3%	1.9%
Coast	10.5%	0.0%	2.1%	1.1%	8.4%	0.1%	9.4%	0.6%	6.3%	1.7%	4.6%	0.0%	7.8%	1.0%
Central	14.7%	1.2%	10.8%	5.9%	6.8%	0.4%	8.6%	0.6%	7.8%	2.6%	8.8%	0.0%	8.3%	1.3%
East	8.1%	0.2%	2.7%	1.0%	6.7%	0.8%	6.2%	0.5%	4.4%	1.2%	5.5%	0.0%	5.5%	0.7%
Total	100.0%	1.9%	100.0%	37.9%	100.0%	7.0%	100.0%	5.3%	100.0%	42.4%	100.0%	2.4%	100.0%	18.9%

Competitive entry shows a relatively flat trend over the last few years and the local telecommunications markets remain dominated by the incumbent providers, with competitors accounting for 18.9 percent of local exchange switched access lines. CLECs' share of exchange lines in the residential market was 5.3 percent in 2008.

There does not appear to be sufficient incentives for CLECs to compete with ILECs on a broad scale in the local residential market. CLECs captured 42.4 percent (up from 39.6% the year before) of business lines by 2008, indicating the larger margins potentially available in that market.

High-speed digital access accounted for 21.4 percent of total LEC revenue in 2008. This was an increase from 18.3 percent in 2007. The 21.4 percent revenue figure for

high-speed access services consists of 6.1 percent from private line services, and 15.3 percent from DSL.

Capital expenditures in support of local exchange service in Oregon in 2008 were estimated at $156.2 million, which equated to 17.5 percent of total revenue ($891 million). Capital investment by ILECs equated to 14.6 percent of ILEC revenues, while CLECs invested an amount equivalent to 29.4 percent of CLEC revenues.

In the residential local exchange market, 40 CLECs said they could not compete with the ILECs on price, 24 thought they could not compete on facilities, 21 believed that the incumbent carrier's name familiarity was a barrier, 21 answered that they did not have enough capacity, 23 responded that cell phone usage has decreased the demand for residential wireline and second-line services, and 22 considered that geographic location made residential competition difficult or expensive.

Out of 34 ILECs, 16 noted that increased cell phone usage has decreased the demand for wireline and second-line services, and 8 ILECs were restrained by their geographical location, which made residential competition difficult or expensive.

While the CLECs had a small percentage of the overall market, they achieved a significant presence in specific market segments. CLECs provided 42.4 percent of switched business lines. The predominant form of CLEC competitive entry was resale. Highest CLEC market concentration as of 2008 was in the Portland Metropolitan region, where CLECs provided 62.2 percent of business lines.

CLECs have a small, 5.3 percent share of the Residential market. It was about the same as the 2006 level. CLECs' share of residential lines increased from 0.7 percent in 1998 to 5.3 percent in 2008.

Finally, revenues from DSL service increased by 18.5percent in 2008. The number of DSL was about the same as previous year.

With the 2005 FCC rulings ending the requirement for ILECs to provide UNE-P, CLECs are faced with the difficult challenge of how to remain competitive. Since then, with CLECs unable to purchase ILECs network facilities at a discount, it appears that CLECs have not made significant capital investments to build or maintain their own networks.

Note that new technologies have a significant impact on telecommunications markets. They facilitate the introduction of products and services with significantly improved or new features into the market. These new products and services often replace traditional telephony products and services. However, to avoid risks, the traditional wireline companies have been quickly moving into Internet-based services.