

# **LOCAL TELECOMMUNICATION COMPETITION SURVEY**

## **2012 ANNUAL REPORT**

Staff Report

Public Utility Commission of Oregon

December 2012

## TABLE OF CONTENTS

<b>EXECUTIVE SUMMARY .....</b>	<b>1</b>
<b>I. PURPOSE OF THE SURVEY .....</b>	<b>6</b>
<b>II. SURVEY PARTICIPANTS AND RESPONSES .....</b>	<b>6</b>
<b>III. SERVICE TYPES .....</b>	<b>7</b>
<b>1. ILEC Service Types .....</b>	<b>7</b>
<b>2. CLEC Service Types .....</b>	<b>8</b>
<b>IV. SWITCHED SERVICES – MARKET SIZE AND SHARE ANALYSIS .....</b>	<b>10</b>
<b>1. Market Size and Shares .....</b>	<b>10</b>
<b>A. Business Market Share.....</b>	<b>13</b>
<b>B. Residential Market Share.....</b>	<b>15</b>
<b>2. CLEC Provisioning of Switched Service .....</b>	<b>16</b>
<b>A. Facility-Based CLECs .....</b>	<b>16</b>
<b>B. UNE-P CLECs .....</b>	<b>17</b>
<b>3. Market Trends in Switched Access Services.....</b>	<b>18</b>
<b>V. HIGH SPEED ACCESS SERVICES .....</b>	<b>25</b>
<b>1. Market Size and Share .....</b>	<b>25</b>
<b>A. Private Line Service .....</b>	<b>25</b>
<b>B. DSL Service .....</b>	<b>27</b>
<b>C. VoIP Service .....</b>	<b>28</b>
<b>2. CLEC Provisioning of Private Line Circuits.....</b>	<b>28</b>

- 3. Market Trends in Local Private Line and DSL Services..... 28
- VI. MARKET SEGMENTS BY REGION AND TYPE OF SERVICE..... 29
  - 1. Market Segments by Region ..... 30
    - A. Switched Services by Region ..... 30
    - B. Private Line Service by Region ..... 32
    - C. DSL Service by Region..... 35
  - 2. Customer Markets by Type of Service ..... 36
    - A. Switched Services..... 36
    - B. Private Line..... 37
    - C. DSL..... 38
- VII. BUSINESS PLANS AND COMPETITION..... 39
  - 1. Capital Expenditures..... 39
  - 2. Competition for Residential Market..... 41
- VIII. CONCLUSIONS ..... 44

## Executive Summary

The staff of the Public Utility Commission of Oregon (OPUC) sent its survey in January 2012 to the 256 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 regarding the local services they provided in 2011. Staff received survey responses from all 32 ILECs and 206 out of 224 CLECs, for a total response rate of 93 percent.

### HIGHLIGHTS

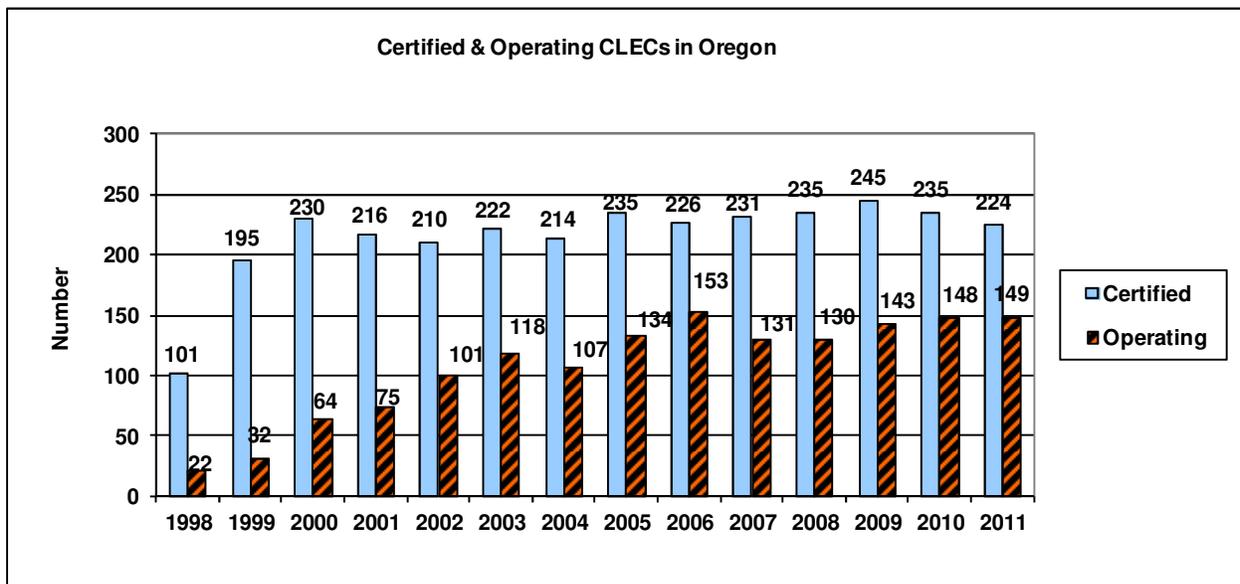
Oregon Local Exchange Service Revenue 2011 in \$Million/Change%.....	\$685.5/-10.9%
ILEC Revenue, \$Millions/Share%/Change%.....	\$544.5/79% share/-7.3%
CLEC Revenue, \$Millions / Share%/Change%.....	\$141/21% share/-22.5%
Total Switched Lines at Year-end 2011/Change%.....	1,358,210/-10.3%
ILEC Lines / Share%/Change%.....	1,003,865 / 73.9%share/-10.7%
CLEC Lines / Share%/Change%.....	354,345 / 26.1%share/-9.5%
Total Residential Switched Lines at Year-end 2011/Change% .....	659,809/-10.4%
ILEC Residential Lines / Share%/Change%.....	594,205 / 90.1%/-12%
CLEC Residential Lines / Share%/Change%.....	65,604 / 9.9%/+6.9%
Total Business Switched Lines at Year-end 2011/Change%.....	570,248/-10.1%
ILEC Business Lines / Share/Change%.....	300,609 / 52.7%/-7.4%
CLEC Business Lines / Share/Change%.....	269,639 / 47.3%/-12.9%
Total Wholesale Switched Lines at Year-end 2011/Change%.....	128,153/-10.9%
ILEC Wholesale Lines / Share/Change%.....	109,051 / 85.1%/-11.7%
CLEC Wholesale Lines / Share/Change%.....	19,102 / 14.9%/-6%
UNE-P and UNE-P Equivalent, Lines / Change % .....	222,187 / -10.6%
CLECs with Certificates .....	224
CLECs Doing Business / % of Total CLECs.....	149 / 66.5%
Total Number of Private Line Circuits/Change% .....	18,265/-12.4%
Lower Capacity Circuits / % of Total.....	11,457 / 63%
Higher Capacity Circuits / % of Total.....	6,808 / 37%

Competition Survey  
Year 2012 Final Report

Total Number of Digital Subscriber Lines (DSL)/ Change%.....	371,040/-8.9%
CLEC Interconnected VoIP Lines / Change %.....	69,099/+32%
All LEC Capital Expenditures in \$Millions / % of Revenue.....	\$180.3/26.3%
ILEC Capital Expenditures in \$Millions / % of Revenue.....	\$113.7/20.9%
CLEC Capital Expenditures in \$Millions / % of Revenue.....	\$66.6/47.2%

While the number of certified CLECs increased from 101 to 224 over the last 13 years, there has been no growth in certified CLECs over the last 11 years. The number of CLECs actually providing service increased from 22 in 1998 to 149 in 2011, which is an average annual growth rate of 15.9 percent.

### CLEC Certificate Trends 1998 through 2011



As of December 2011, 149 of the 224 certified CLECs reported they were providing local exchange services (66.5%, up from 63.0% in the prior year). Using a widely recognized measure of market share, the percentage of local switched telephone lines, CLEC market share was 26.1 percent in 2011 (up from 25.8% in the prior year). Survey responses indicate that competitive entry into Oregon's residential telecommunications market remains limited. CLECs had a 9.9 percent (up from 8.3% in 2010) share of the Oregon residential market in 2011. Most competitive entry is in the business market.

Competition Survey  
Year 2012 Final Report

CLECs supplied 47.3 percent of business customers' switched local exchange lines statewide in 2011, compared to 48.8 percent in the prior year.

Total Oregon LEC switched local exchange lines declined 10.3 percent in 2011, from 1.514 million in 2010 to 1.358 million in 2011.

The following table summarizes the Survey response rates and service operation rates.

**Survey Response Rates and Service Operation Rates**

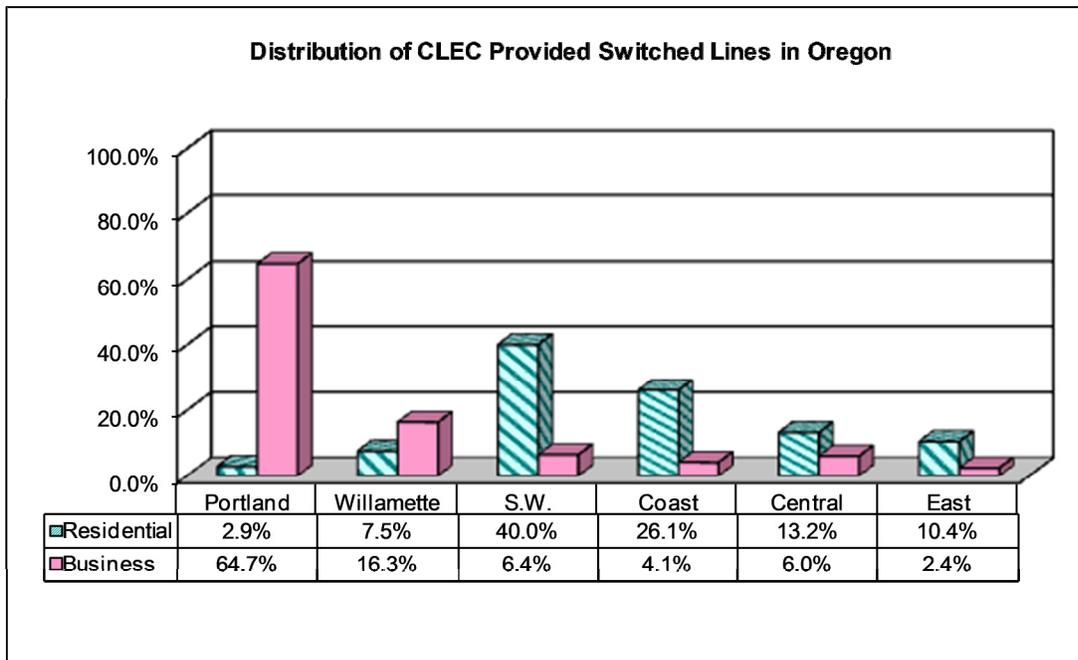
2011	Surveys Sent	Responses	Response Rate %
<b>Total LECs</b>	<b>256</b>	<b>238</b>	<b>93.0%</b>
<b>ILECs</b>	<b>32</b>	<b>32</b>	<b>100.0%</b>
<b>CLECs</b>	<b>224</b>	<b>206</b>	<b>92.0%</b>
	Surveys Sent	Service Provided	Operation Rate %
<b>Total LECs</b>	<b>256</b>	<b>181</b>	<b>70.7%</b>
<b>ILECs</b>	<b>32</b>	<b>32</b>	<b>100.0%</b>
<b>CLECs</b>	<b>224</b>	<b>149</b>	<b>66.5%</b>

Competitive entry into Oregon's market for local telecommunications services varies by region.

Seventy-six percent (76.1%) of CLECs' lines are business lines. Sixty-five percent of CLECs provided switched line service in Portland, with lower provisioning levels in the Willamette Valley, the Southwest, Central, Coast, and East regions.

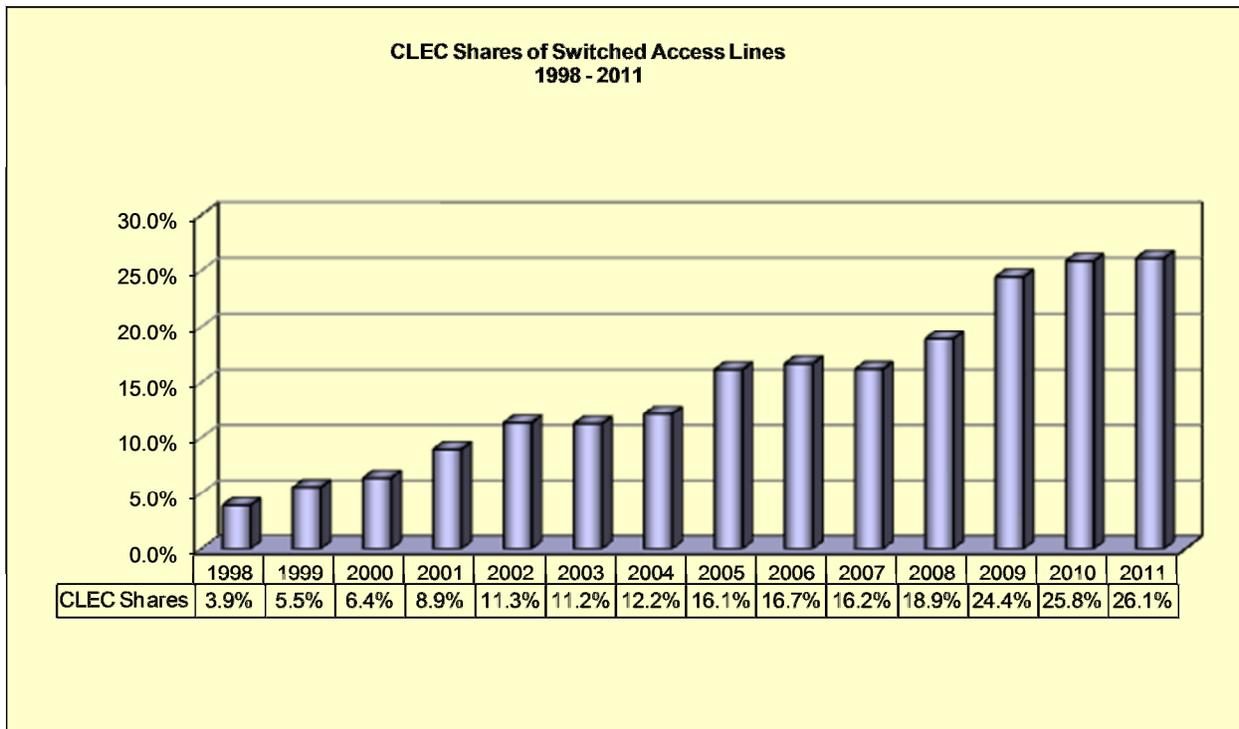
Of the 1.358 million switched access lines served by all local exchange carriers, almost 50 percent were residential lines. CLECs served 9.9 percent and ILECs served 90.1 percent of Oregon's residential lines. Thirty-five percent (35.2%) of all residential lines were in the Portland area.

**Distribution of CLEC Switched Access Lines by Region**



Approximately 64.7 percent of CLECs' business lines and 2.9 percent of CLECs' residential lines were in the Portland Metropolitan area.

**CLEC Share of Switched Access Lines: 1998 – 2011**



Switched access lines including residential, business and wholesale served by CLECs at the end of 2011 represented 26.1 percent of total switched access lines in Oregon, compared with non-ILEC Share of 36.3 percent as of the end of June 30, 2011 (FCC Table 1 - End-User Switched Access Lines and VoIP Subscriptions). For residential and business lines, Oregon CLECs have a 27.2 percent market share, compared to the national CLEC average of 25 percent of residential and business lines (FCC Table 8 - Residential and Business Presubscribed Switched Access Lines, as of June 30, 2011). CLECs had 9.9 percent of the residential market in Oregon compared with 7.8 percent nationally in June 30, 2011. In the business market, CLECs' share was 47.3 percent in Oregon compared to 43.7 percent nationally.<sup>1</sup> (FCC Table 8)

The number of CLEC lines in Oregon declined by 9.5 percent in 2011, from 391,418 (in 2010) to 354,345 lines. By comparison, total ILEC lines declined by 10.7 percent in 2011, from 1,123,531 (in 2010) to 1,003,865 lines.

<sup>1</sup> Federal Communications Commission (FCC) Local Telephone Competition. **6/12 Release**. As of 6/30/11. [Tables](http://transition.fcc.gov/wcb/iatd/comp.html) (Excel Format). <http://transition.fcc.gov/wcb/iatd/comp.html>

## 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 was 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 2012, Commission staff sent a survey to all 256 carriers holding a certificate issued by the Commission to provide local services in Oregon. Of the 256 LECs, 32 are ILECs, and 224 are CLECs. The ILECs 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 2011.

All 32 ILECs responded to the survey. For CLECs, 206 of the 224 (92%) responded. The overall response rate for all LECs was 93 percent (Table 1). In 2011, 70.7 percent (versus 67% in 2010) of all certified carriers were actually providing services, with 100 percent of ILECs and 66.5 percent (versus 63% in 2010) of CLECs (149 out of 224) providing services. This analysis assumes non-responding CLECs in each year did not provide local service in Oregon in that year.

**Table 1. Survey Response Rates and Service Operation Rates**

2011	Surveys Sent	Responses	Response Rate %
<b>Total LECs</b>	<b>256</b>	<b>238</b>	<b>93.0%</b>
<b>ILECs</b>	<b>32</b>	<b>32</b>	<b>100.0%</b>
<b>CLECs</b>	<b>224</b>	<b>206</b>	<b>92.0%</b>
	Surveys Sent	Service Provided	Operation Rate %
<b>Total LECs</b>	<b>256</b>	<b>181</b>	<b>70.7%</b>
<b>ILECs</b>	<b>32</b>	<b>32</b>	<b>100.0%</b>
<b>CLECs</b>	<b>224</b>	<b>149</b>	<b>66.5%</b>

### III. Service Types

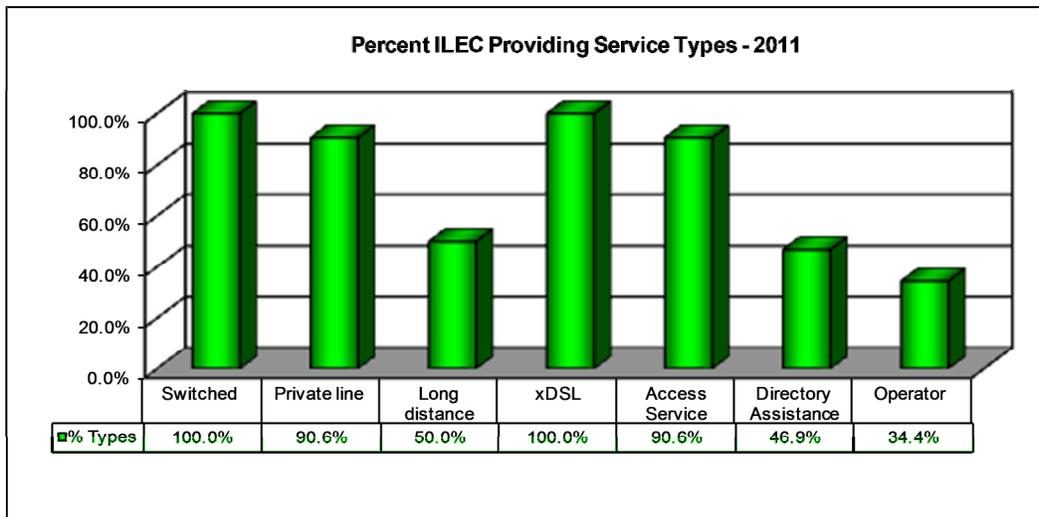
#### 1. ILEC Service Types

All 32 certified ILECs provided to retail customers local exchange switched services. 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 of ILECs providing each type of service in 2011 are shown in Table 2 and in Figure 1.

**Table 2. ILEC Market Coverage by Service Category**

Service Types	# of ILECs Providing Service	% of ILECs Providing Service
Local Exchange Switched Service	32	100.0%
Local Exchange Private Line Service:	29	90.6%
Lower Capacity	28	87.5%
Higher Capacity	23	71.9%
Long Distance Service	16	50.0%
xDSL (Digital Subscriber Line)	32	100.0%
Access service	29	90.6%
Directory Assistance	15	46.9%
Operator	11	34.4%
Telecom using Cable TV Facilities	0	0.0%
Telecom using VoIP	0	0.0%
Others	6	18.8%

**Figure 1. ILEC Service Types and Distributions**



All 32 ILECs provided switched access service and xDSL service, 90.6 percent of ILECs provided private line service, 50 percent provided long distance service, 90.6 percent provided access service, 46.9 percent provided directory assistance service, and 34.4 percent provided operator service in 2011.

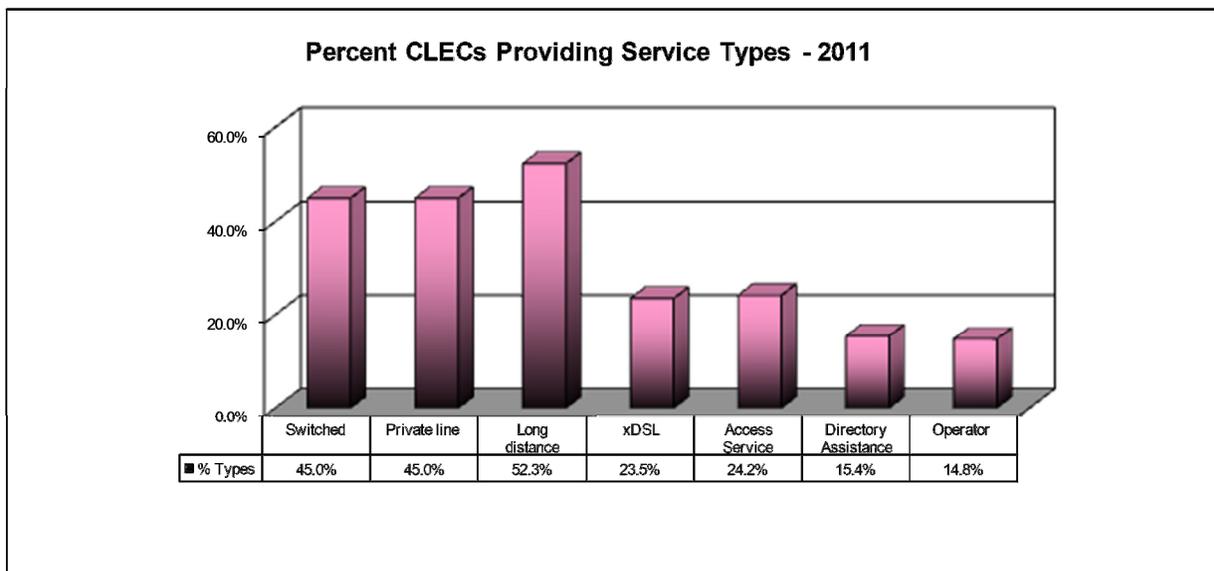
## 2. CLEC Service Types

As of December 2011, 149 (66.5%) of the 224 certified CLECs were providing some kind of telecommunications service in Oregon (up from 63% a year earlier). This analysis assumes non-responding CLECs in each year did not provide local service in Oregon in that year. Of the 149 CLECs providing services, 67 provided local exchange service (versus 69 in 2010). Seventy-eight (78) CLECs provided long distance service (versus 70 in 2010) and 67 provided inter-exchange private line services. CLEC service types and service distributions for 2011 are shown in Table 3 and Figure 2 below.

**Table 3. CLEC Market Coverage by Service Category**

CLEC Service Types	#of CLECs Providing	% of CLECs Providing
	This Service	This Service
<b>Operating CLECs</b>	<b>149</b>	
<b>Local Exchange Switched Service</b>	<b>67</b>	<b>45.0%</b>
<b>Local Exchange Private Line Service:</b>	<b>67</b>	<b>45.0%</b>
<b>Lower Capacity</b>	<b>21</b>	<b>14.1%</b>
<b>Higher Capacity</b>	<b>46</b>	<b>30.9%</b>
<b>Long Distance Service</b>	<b>78</b>	<b>52.3%</b>
<b>xDSL (Digital Subscriber Line)</b>	<b>35</b>	<b>23.5%</b>
<b>Access service</b>	<b>36</b>	<b>24.2%</b>
<b>Directory Assistance</b>	<b>23</b>	<b>15.4%</b>
<b>Operator</b>	<b>22</b>	<b>14.8%</b>
<b>Telecom using Cable TV Facilities</b>	<b>5</b>	<b>3.4%</b>
<b>Telecom using VoIP</b>	<b>25</b>	<b>16.8%</b>
<b>Others</b>	<b>44</b>	<b>29.5%</b>

**Figure 2. CLEC Service Types and Distributions**



## IV. Switched Services – Market Size and Share Analysis

### 1. Market Size and Shares

There were 149 CLECs competing in Oregon’s local telecommunication services market in 2011. CLECs as a group had a market share ranging from 12.2 percent to 26.1 percent, depending on how market share is defined. In this report, market share is calculated using three measures: the number of customers served; the number of lines provided; and revenues.

**Table 4. 2011 Oregon Switched Service Market Shares**

2011	Customers	Lines	Revenue-\$millions
ILECS	730,453	1,003,865	400.7
CLECS	101,535	354,345	91.3
<b>Total</b>	<b>831,988</b>	<b>1,358,210</b>	<b>492.0</b>
Share %	Customers	Lines	Revenue
ILECS	87.8%	73.9%	81.4%
CLECS	12.2%	26.1%	18.6%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>

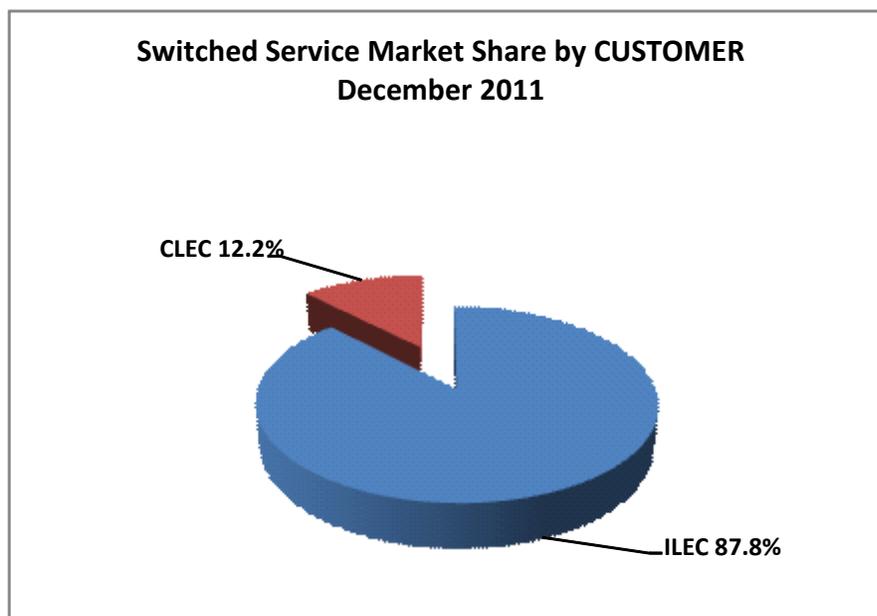
CLECs’ share of retail customers<sup>2</sup> in 2011 was 12.2 percent. According to the survey responses, Oregon LECs provided local exchange switched services to 831,988 Oregon customers. ILECs served 730,453 (87.8%) of the total, while CLECs served 101,535 customers (12.2%) (see Table 4 and Figure 3).

The 32 ILECs providing local exchange switched service had 87.8 percent of customers, (88% in 2010 also), 73.9 percent of switched access lines (74% in 2010) and 81.4 percent of switched service revenues (77.3% in 2010) (see Table 4).

<sup>2</sup> DEFINITIONS are from INSTRUCTIONS FOR ANNUAL REPORTS (FORM C AND FORM L) at [http://www.oregon.gov/puc/telecom/Form/2011/FormC\\_L2011\\_Instructions.pdf](http://www.oregon.gov/puc/telecom/Form/2011/FormC_L2011_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.

**Figure 3. Market Shares for Switched Service**



CLECs' share of retail lines<sup>3</sup> in 2011 was 26.1 percent (Table 4). Oregon LECs supplied to retail customers 1,358,210 (a decline of 10.3% from a year earlier) local switched telephone lines. Of that total, ILECs supplied 73.9 percent (1,003,865, 10.7% less than the prior year) of all lines and CLECs the remaining 354,345 (26.1% of the total and a 9.5% decline from the prior year). CLECs supplied an average of 3.5 lines per customer (3.7 in 2010) while ILECs supplied an average of 1.4 lines per customer (and 1.5 in 2010).

Total retail revenues from all switched access services in Oregon were an estimated \$492 million in 2011 (down 14% from \$571.9 million in 2010). ILECs received \$400.7 million (down 9.3% from \$441.9 million in 2010), and CLECs received the remaining \$91.3 million (down 29.8% from \$130 million in 2010). CLECs' retail revenues,<sup>4</sup> such as switched access lines, private lines and DSL, had 18.6 percent of market share in 2011 versus 22.7 percent in 2010.

<sup>3</sup> **Local exchange line** – a voice-level transmission path (64 kbps digital or less than 4 kHz analog) linking an end user (retail customer) location with the switching center providing dial tone.

<sup>4</sup> **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 non regulated 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 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.

CLECs achieved a higher share of lines per customer due to CLECs' focus on business customers. Of total CLECs' switched service revenue, 71 percent was from the business sector in 2011. Of total ILECs' switched service revenue, 40.8 percent was from the business sector in 2011.

ILECs' average annual switched service revenue-per-line was \$399. CLECs' average annual switched service revenue-per-line was \$258 (see Table 5).

**Table 5. Selected 2011 Switched Service Averages**

2011	CLECs	ILECs
<b>Lines Per Customer</b>	<b>3.5</b>	<b>1.4</b>
<b>Annual Revenue Per Line</b>	<b>\$258</b>	<b>\$399</b>
<b>Annual Revenue Per Customer</b>	<b>\$899</b>	<b>\$549</b>

The 32 ILECs providing local exchange switched service had 87.8 percent of customers (88% in 2010), 73.9 percent of switched access lines (74.2% in 2010) and 81.4 percent of switched service revenues (77.3% in 2010) (see Table 4).

In 2011, the "big four" ILECs (CenturyTel, CenturyLink, United, and Frontier) had a 77.7 percent share of total customers (versus 77.7% in 2010), 66.8 percent of total switched lines (67.5% in 2010), and 74.8 percent of total switched service revenues (71.3% in 2010) (see Table 6).

**Table 6. 2011 Market Shares of ILECs, CLECs, and the Big 4 ILECs**

Market Shares	ILECs/Total	CLECs/Total	Big 4 ILECs/Total
<b>Residential Customers</b>	<b>90.6%</b>	<b>9.4%</b>	<b>79.9%</b>
<b>Business Customers</b>	<b>76.4%</b>	<b>23.6%</b>	<b>68.3%</b>
<b>Wholesale Customers</b>	<b>96.3%</b>	<b>3.7%</b>	<b>96.3%</b>
<b><u>Total Customers</u></b>	<b><u>87.8%</u></b>	<b><u>12.2%</u></b>	<b><u>77.7%</u></b>
<b>Residential Lines</b>	<b>90.1%</b>	<b>9.9%</b>	<b>79.1%</b>
<b>Business Lines</b>	<b>52.7%</b>	<b>47.3%</b>	<b>48.6%</b>
<b>Wholesale Lines</b>	<b>85.1%</b>	<b>14.9%</b>	<b>85.1%</b>
<b><u>Total Lines</u></b>	<b><u>73.9%</u></b>	<b><u>26.1%</u></b>	<b><u>66.8%</u></b>
<b>Residential Revenues</b>	<b>89.2%</b>	<b>10.8%</b>	<b>79.0%</b>
<b>Business Revenues</b>	<b>71.7%</b>	<b>28.3%</b>	<b>67.6%</b>
<b>Wholesale Revenues</b>	<b>94.8%</b>	<b>5.2%</b>	<b>94.8%</b>
<b><u>Total Revenues</u></b>	<b><u>81.4%</u></b>	<b><u>18.6%</u></b>	<b><u>74.8%</u></b>

**A. Business Market Share**

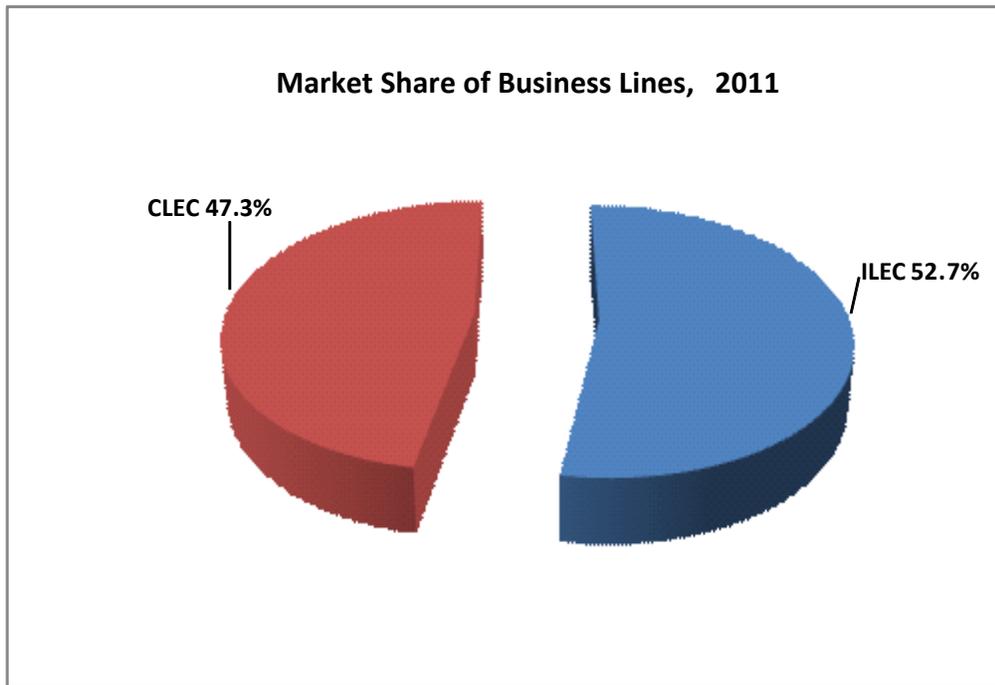
Customers: CLECs supplied service to 23.6 percent of business customers in 2011, compared to 12.2 percent of all customers (residential, business, and wholesale).

Lines: CLECs supplied 47.3 percent of business switched access lines (see Figure 4). This is substantially greater than the 26.1 percent CLEC share of Oregon total lines.

Revenues: Similarly, CLECs had a 28.3 percent share of business switched service revenues, compared to 18.6 percent of total switched service revenues (see Table 6). CLECs had 18.6 percent of Oregon's total switched access service revenues and ILECs had 81.4 percent.

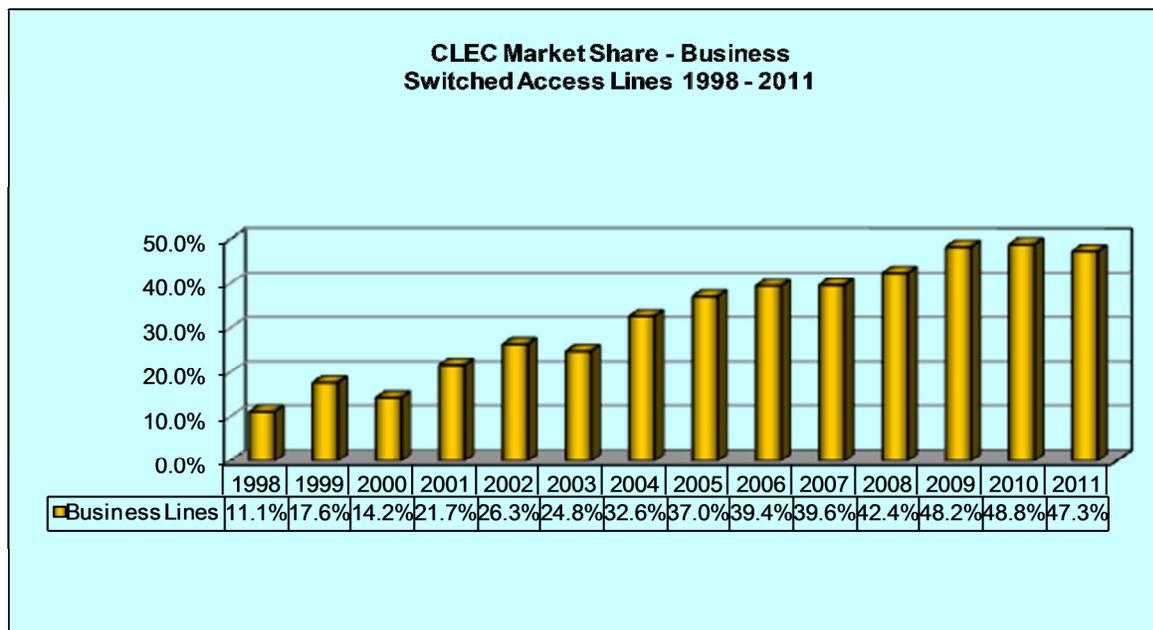
Revenue per line: CLECs' 2011 revenue per business line was \$240. ILECs' was \$544 per business line.

**Figure 4. Market Shares as Measured by Business Lines**



CLECs' market share of business switched access lines has steadily increased over the past 13 years; growing from 11 percent in 1998 to 47.3 percent in 2011 (see Figure 5).

**Figure 5. CLEC Business Switched Access Line Market Share Growth**



**B. Residential Market Share**

**Table 7. 2011 Residential Switched Services Market Shares**

Residential Market Shares	Residential Customers	Residential Lines	Residential Revenues (\$Millions)
<b>ILECs</b>	<b>596,257</b>	<b>594,205</b>	<b>205.3</b>
<b>CLECs</b>	<b>61,648</b>	<b>65,604</b>	<b>24.8</b>
<b>Total</b>	<b>657,905</b>	<b>659,809</b>	<b>230.2</b>
<b>ILECs/Total</b>	<b>90.6%</b>	<b>90.1%</b>	<b>89.2%</b>
<b>CLECs/Total</b>	<b>9.4%</b>	<b>9.9%</b>	<b>10.8%</b>

CLECs' share of residential customers was 9.4 percent in 2011 (see Table 7). According to the survey, Oregon LECs provided local exchange switched services to 657,905 Oregon residential customers. ILECs served 596,257 residential customers or 90.6 percent of the total, while CLECs served 61,648 residential customers or 9.4 percent of the total.

CLECs' share of residential lines was 9.9 percent in 2011. Oregon LECs supplied a total of 659,809 local switched telephone lines to residential customers. ILECs supplied 90.1 percent or 594,205 residential lines, and CLECs provided 9.9 percent or 65,604 residential lines.

ILECs served 90.1 percent of the residential line market in 2011 (versus 91.7 percent in 2010). The "big four" ILECs (CenturyTel, CenturyLink, United, and Frontier) provided 79.1 percent of total residential lines. 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 concentrated businesses. CLECs provided 9.9 percent of total residential lines, while ILECs provided 90.1 percent. Most CLEC operations focus on the more profitable business market.

Total residential revenues from local exchange access switched services in Oregon in 2011 were an estimated \$230.2 million as compared with \$257.6 million in 2010. Average residential annual revenue per line was \$345.53 for ILECs and \$378.77 for CLECs.

## **2. CLEC Provisioning of Switched Service**

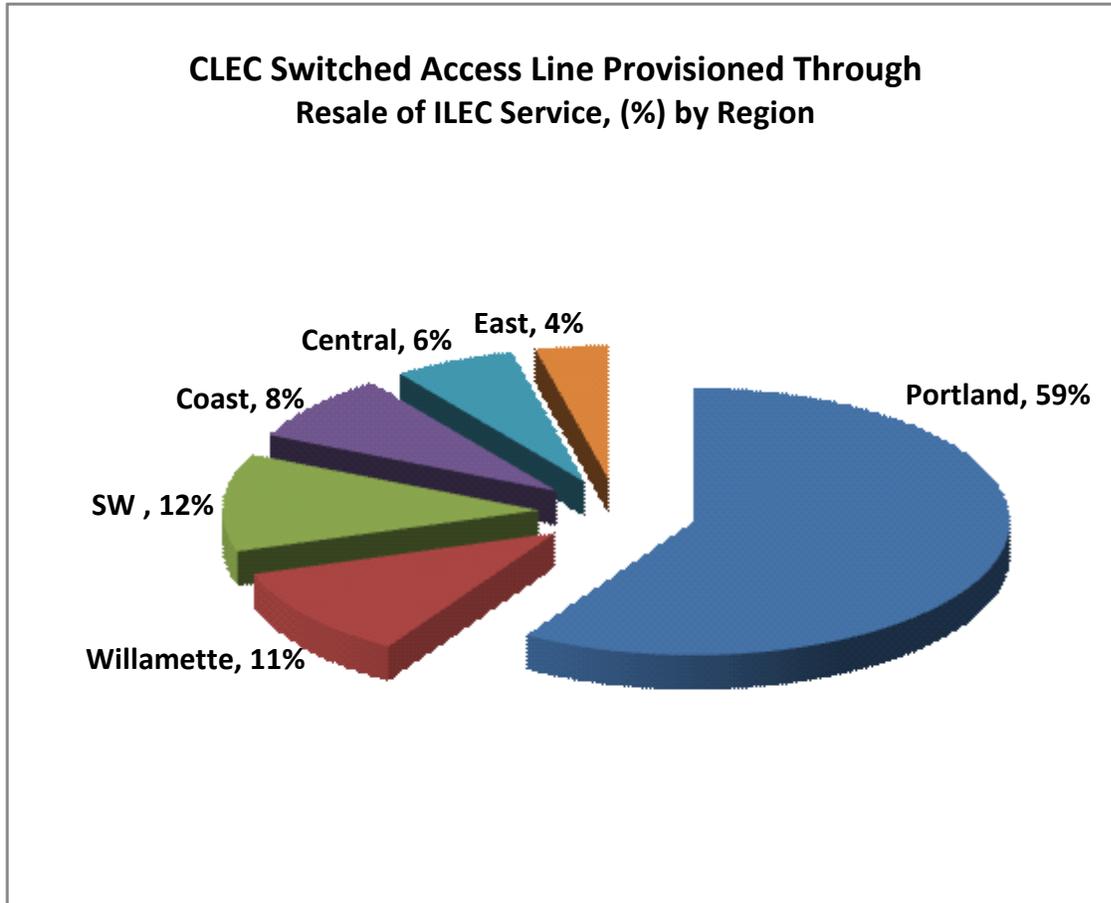
As of December 2011, forty of the 67 CLECs (60%) provided local switched service by reselling ILEC services. Reselling involves a CLEC buying retail services from ILECs, and reselling those services under the CLEC's own name to its retail customers.

### **A. Facility-Based CLECs**

Approximately 39 percent (26 of 67) of the CLECs providing local switched service are fully or partially facility-based providers. These fully or partially facility-based CLECs provided 311,018 switched access lines in 2011, which was 87.8 percent of CLECs' total lines. The survey identified 26 CLEC facilities-based providers. However, not all of these lines were provisioned using facilities owned and operated by the CLEC. A facilities-based CLEC typically owns and operates some telecommunications facilities and also resells services obtained from one or more ILECs.

For facility-based CLECs, 59 percent of resold ILEC local switched access service occurred in the Portland area, and 11 percent occurred in the Willamette area (see Figure 6).

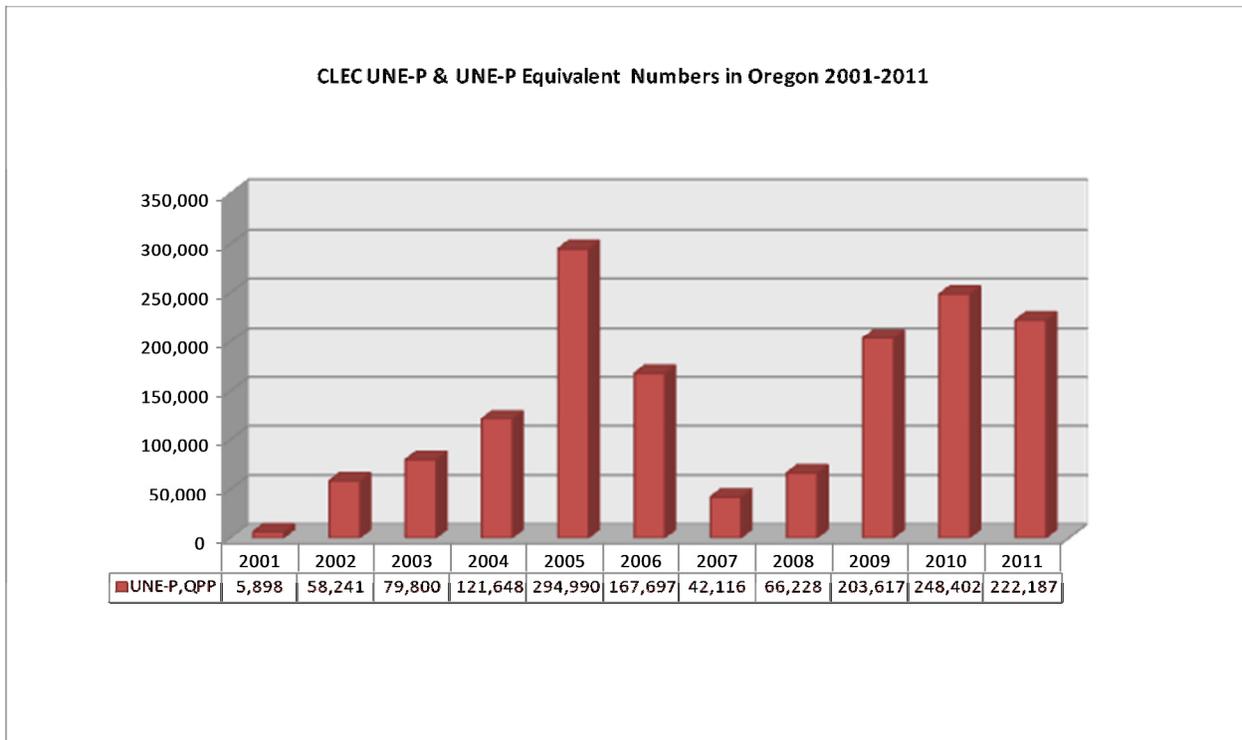
**Figure 6. Regional Distribution – CLEC Resale of ILEC Switched Access Lines in 2011**



**B. UNE-P CLECs**

Twenty-five CLECs reported providing switched access lines by purchasing ILEC Unbundled Network Elements Platform (UNE-P) or UNE-P equivalent. The UNE-P and UNE-P equivalent switched access lines were, in December of the respective year, 222,187 (2011), 248,402 (2010), 203,617 (2009), 66,228 (2008) and 42,116 (2007). Figure 7 below indicates that the total of UNE-P plus QPP values changed as the Federal Communications Commission's (FCC) policy changed.

**Figure 7. Oregon CLEC UNE-P and UNE-P Equivalent Totals 2001-2011**



### 3. Market Trends in Switched Access Services

The CLEC market share increased from 3.9 percent in 1998 to 26.1 percent in 2011. The CLEC and ILEC shares of local switched access lines in 2011 are 26.1% and 73.9%, respectively. The CLEC market share of lines in 2010 was 25.8% and the ILEC was 74.2% (see Table 8 below).

Both ILEC and CLEC lines have dropped. ILEC's line numbers dropped by 10.7 percent from previous survey year to current year, while CLEC line numbers dropped by 9.5 percent. CLEC has lost lines for the second consecutive year in 2011, while ILEC has lost lines 10 years in a row. In 2011, CLEC market share slightly increased, this reflects that the line loss rate from ILECs was faster than the line loss rate from CLECs.

**Table 8. Trends in Switched Access Lines, 1998 to 2011**

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%
Dec-09	1,265,459	409,022	1,674,481	24.4%
Dec-10	1,123,531	391,418	1,514,949	25.8%
Dec-11	1,003,865	354,345	1,358,210	26.1%

**Figure 8. ILEC Switched Access Services Market Share, 1999 to 2011**

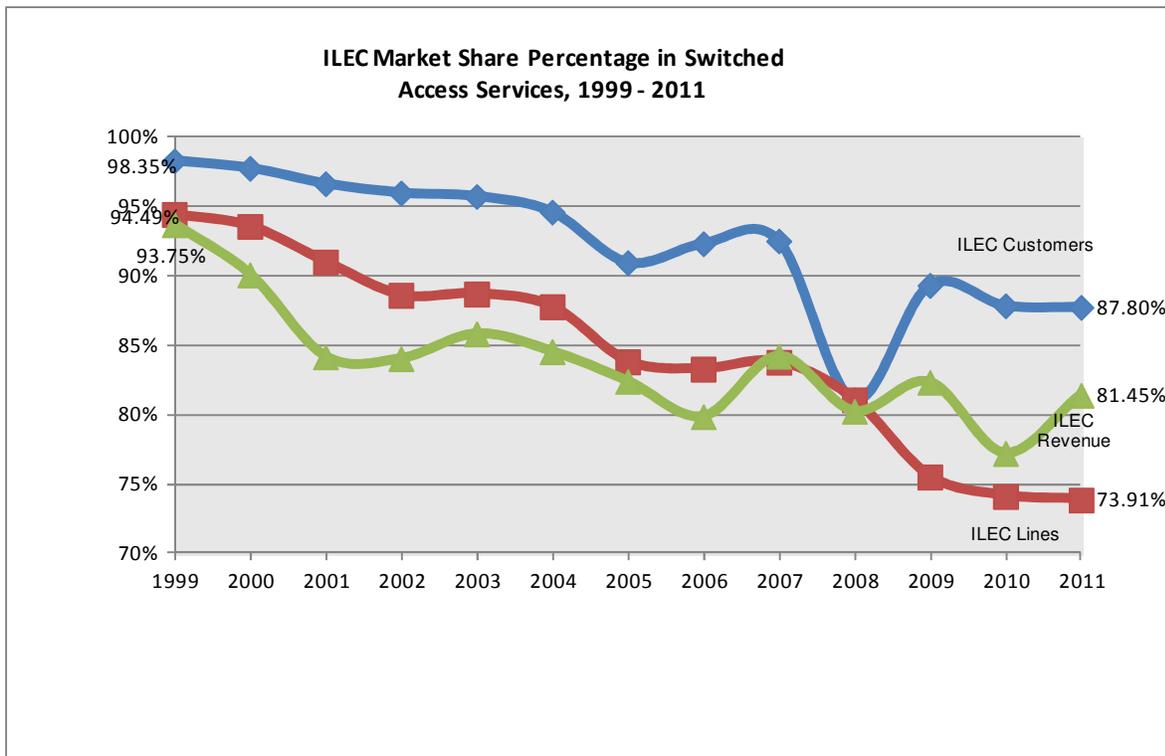


Figure 8 shows the declining trend for ILECs' share of switched access services. Over the period of 1999 to 2011, the share of ILECs' total customer numbers decreased from 98.3 percent to 87.8 percent. The share of ILECs' total switched access lines decreased from 96.1 percent to 73.9 percent. The share of ILECs' total switched revenue decreased from 95 percent to 91.4 percent.

**Figure 9. CLEC Switched Access Lines**

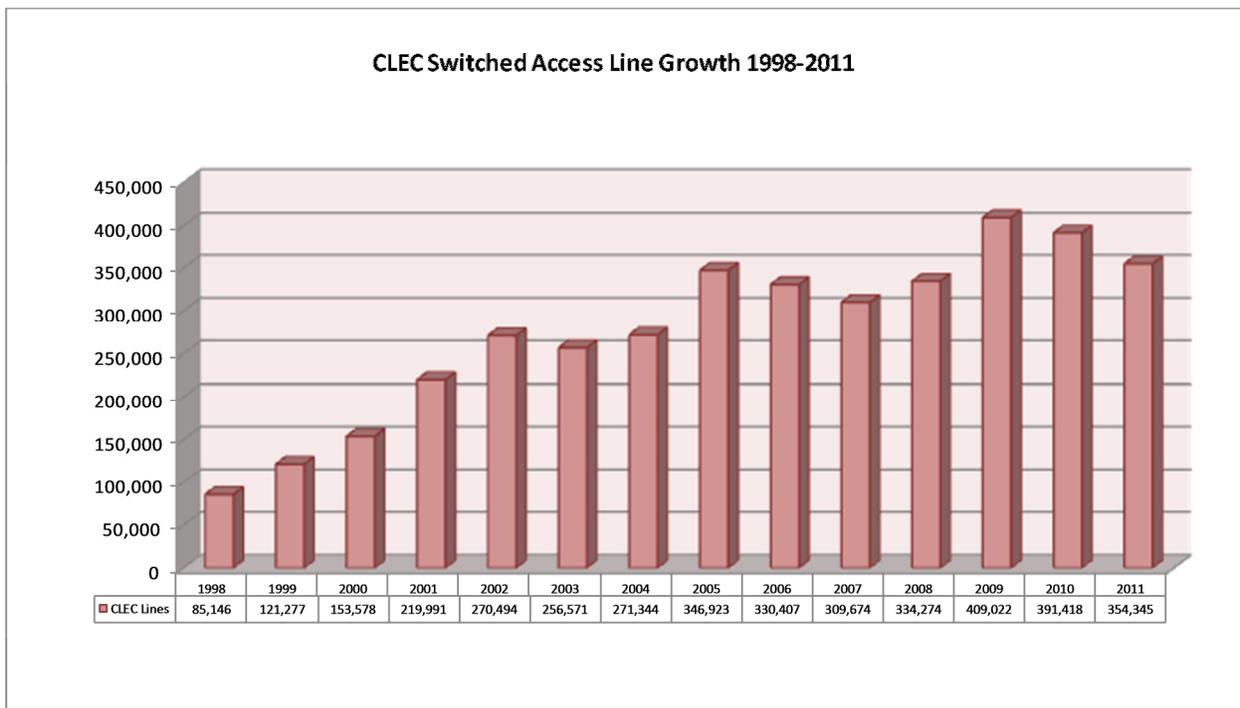
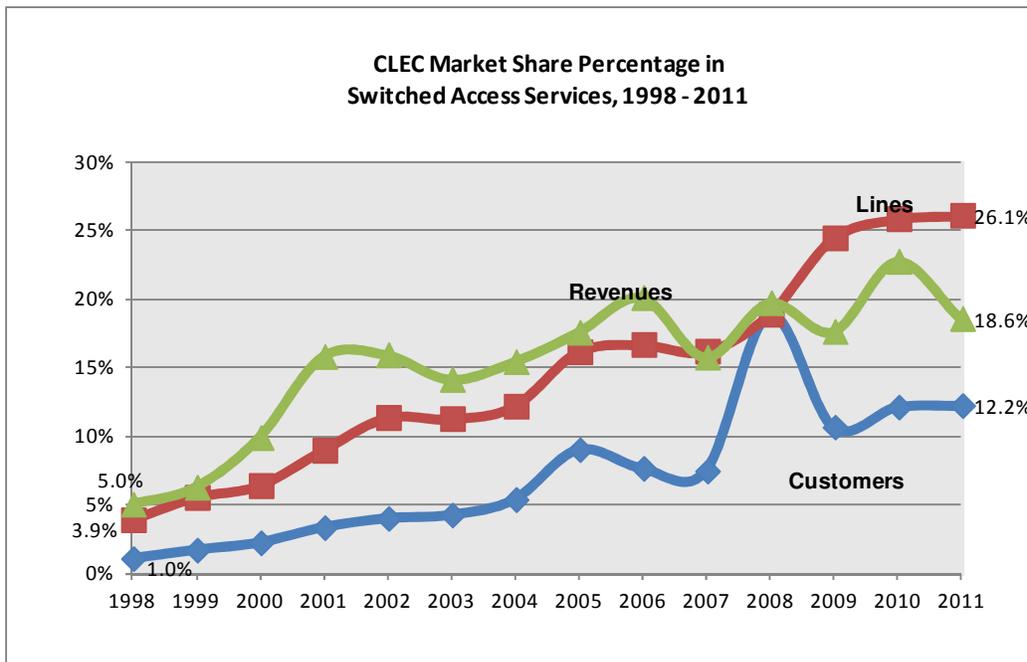


Table 8 and Figure 9 show a decline in CLECs' switched access lines in 2011. From 1998 to 2011, the annual growth in CLECs' switched lines averaged 11.6 percent; from 85,146 lines in 1998 to 354,345 lines in 2011, and total CLEC lines have increased by 316 percent over this timeframe. During the same period, ILECs' switched access lines declined by an average of 5.5 percent per year, from 2.1 million lines in 1998 to 1.0 million lines in 2011. Total ILEC lines have declined by 52 percent since 1998. The total number of switched access lines, both ILECs' and CLECs', has declined by 38 percent since 1998. This decline is presumably due to the substitution of cell phone service for switched access lines, the replacement of second lines with DSL service, and the use of services provided by cable companies for Internet access.

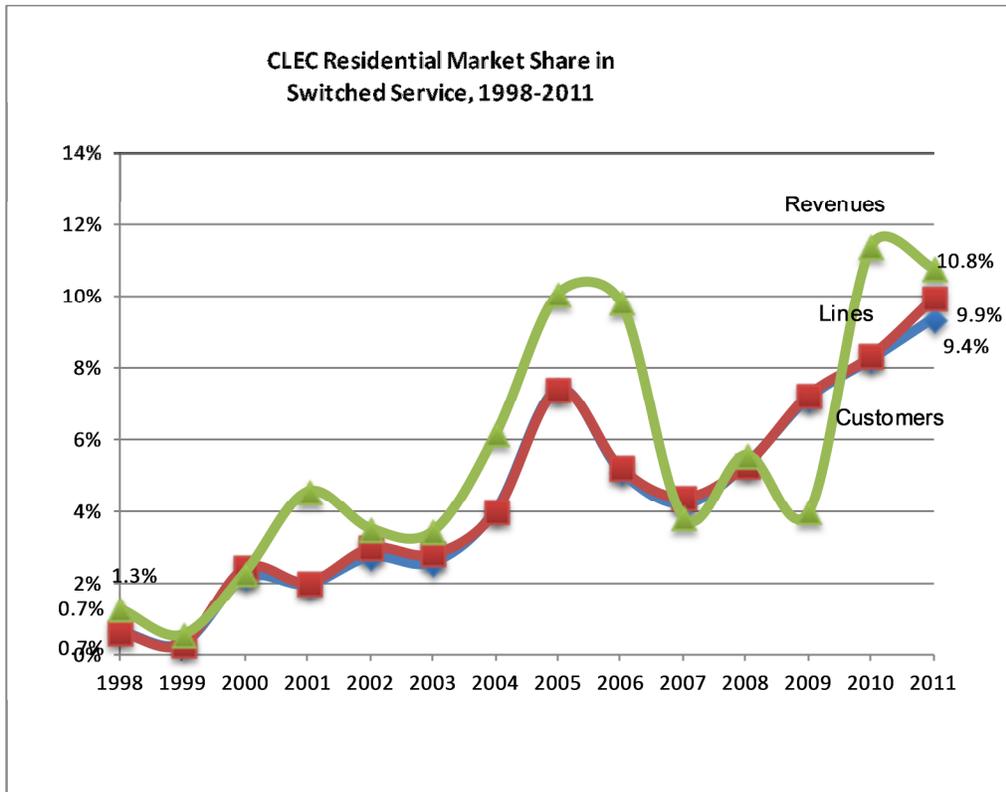
Figure 10 below shows CLECs' market share growth. From 1998 to 2011, CLECs' share of switched service revenue was 18.6 percent in 2011 compared to a 5.0 percent market share in 1998. Over the same period, CLECs' share of switched lines increased to 26.1 percent in 2011, up from 3.9 percent in 1998. CLECs' share of customers was 12.2 percent in 2011 versus 1 percent in 1998.

**Figure 10. CLEC Switched Access Services Market Share 1998 to 2011**



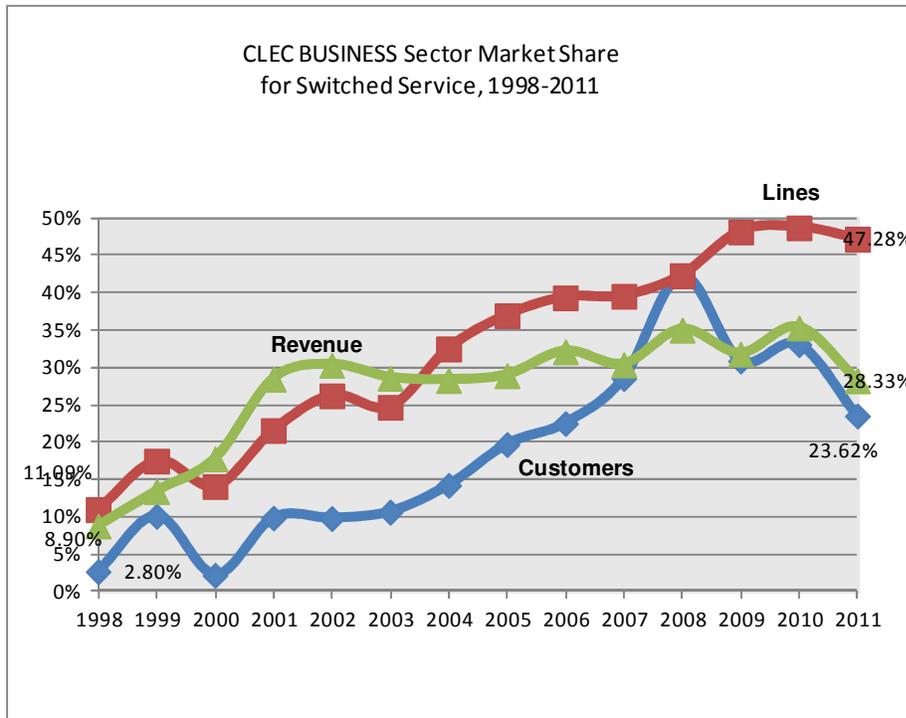
CLECs' share of residential switched service revenue was 10.8 percent of total ILEC and CLEC residential switched service revenue in 2011, compared to 1.3 percent in 1998. Over the same period, CLECs' market share for residential lines increased to 9.9 percent from 0.65 percent, and CLECs' market share for residential customers increased to 9.4 percent from 0.66 percent (see Figure 11).

**Figure 11. CLEC Residential Market Shares for Switched Access Services: 1998 to 2011**



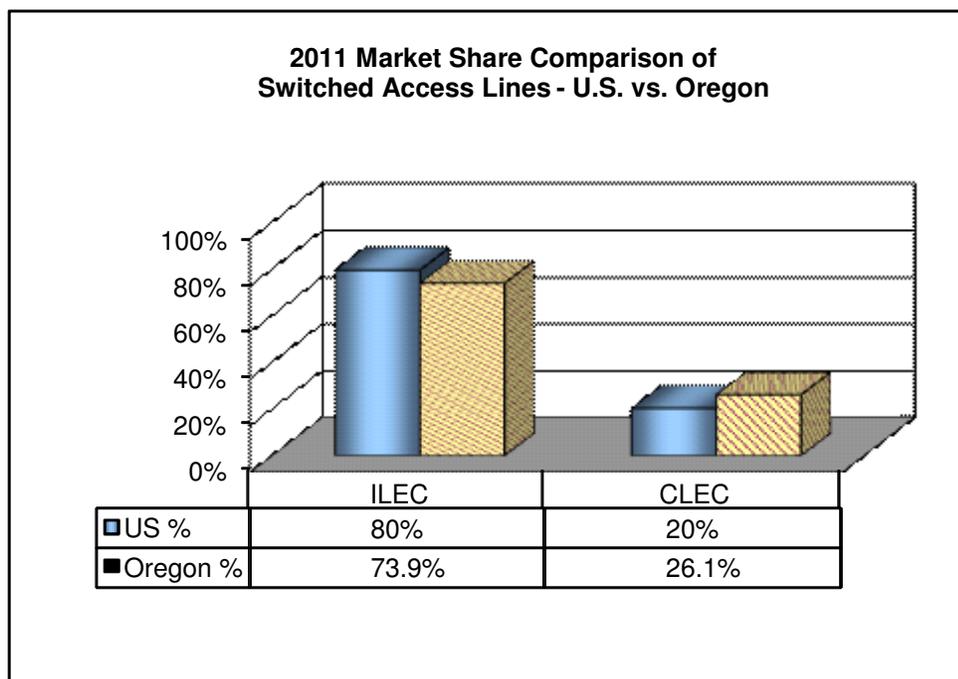
CLECs' share of total business switched service revenue increased to 28.3 percent in 2011, up from 8.9 percent 13 years ago in 1998. In the same period, CLECs' share of business lines increased to 47.3 percent from 11.1 percent. CLECs' share of business customers increased to 23.6 percent from 2.8 percent over the same period (see Figure 12).

**Figure 12. CLEC Business Market Shares for Switched Access Service: 1998 to 2011**



According to the FCC’s Local Telephone Competition, 6/2012 Release, as of 6/30/2011, Tables (in Excel Format), U.S. end-use customers obtained local telephone service by utilizing approximately 89.3 million ILEC switched access lines (approximately 80% of total LEC lines) and 22.9 million CLEC switched access lines (approximately 20% of total). In Oregon, ILECs provided 73.9 percent of total switched access lines and CLECs provided 26.1 percent, CLECs provided an additional six percent of total switched access lines in Oregon as compared with the U.S. as a whole in 2011 (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 used by customers to transmit information between two or more pre-selected and fixed locations within the geography served by a telephone exchange. Local private line services are available in a range of capacities or bandwidths. The survey distinguishes between lower capacity circuits (bandwidth less than 1.544 Megabits per second, or Mbps) and higher capacity circuits (bandwidth of 1.544 Mbps or greater).

LEC revenue from private line services was 8.8 percent of total 2011 service revenues, DSL was 19.4 percent, and switched service was 71.8 percent of total 2011 revenues.

Sixty-seven (67) CLECs reported they provide local exchange private line services. CLECs' private line market shares ranged from 24.7 percent when measured by private line circuits to 57.8 percent when measured by private line revenue (see Table 9). The

percentage depends on how market share is defined. The survey measured CLECs' market share in three ways: customers, circuits, and revenues.

**Table 9. Local Exchange Private Line Services**

2011	All LECs	CLECs	ILECs	CLEC Share
<b>Private Line Customers</b>	<b>3,875</b>	<b>1,224</b>	<b>2,651</b>	<b>31.6%</b>
<b>Total Private Line Circuits</b>	<b>18,265</b>	<b>4,519</b>	<b>13,746</b>	<b>24.7%</b>
<b>Lower Capacity</b>	<b>11,457</b>	<b>100</b>	<b>11,357</b>	<b>0.9%</b>
<b>Higher Capacity</b>	<b>6,808</b>	<b>4,419</b>	<b>2,389</b>	<b>64.9%</b>
<b>Annual Revenues (\$000)</b>	<b>\$60,176</b>	<b>\$34,796</b>	<b>\$25,379</b>	<b>57.8%</b>
<b>Annual Revenue per Circuit</b>	<b>\$3,295</b>	<b>\$7,700</b>	<b>\$1,846</b>	

CLECs' share of local private line customers<sup>5</sup> was 31.6 percent, or 1,224 customers,<sup>6</sup> while ILECs provided local private line service to 2,651 customers, or 68.4 percent of the total.

CLECs' market share of all private line circuits<sup>7</sup> was 24.7 percent. CLECs' market share of lower capacity circuits was 0.9 percent, while their market share for higher capacity circuits was 64.9 percent. CLEC private line circuits, including lower and higher capacity circuits, totaled 4,519 in 2011.

<sup>5</sup> **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, the entity counts as one customer.

<sup>6</sup> Note that survey results may overstate 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.

<sup>7</sup> **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 bill the customer for both ends of the circuit, this counts as 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.

**Table 10. Private Line Service Revenues: 2011**

2011	Total	ILECs	CLECs
<b>Shares</b>	<b>100.0%</b>	<b>42.2%</b>	<b>57.8%</b>
<b>Revenues (\$Millions)</b>	<b>\$60.2</b>	<b>\$25.4</b>	<b>\$34.8</b>

CLECs' share of total local private line service revenues<sup>8</sup> was 57.8 percent (see Table 10). Total LEC revenues from local private line services in 2011 were an estimated \$60 million. Of the total estimated annual revenues, ILECs received \$25.4 million (42.2%) and CLECs \$34.8 million (57.8%).

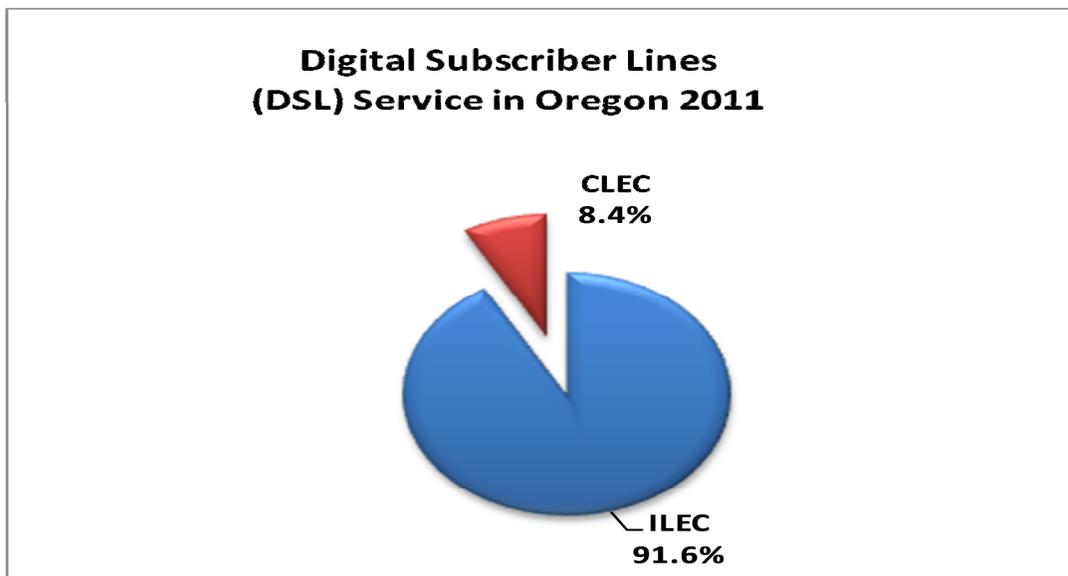
**B. DSL Service**

Digital subscriber line (DSL) is a service which uses a technology that combines two-way voice and data transmissions at very high speeds over normal telephone lines. The total number of LEC DSL circuits in Oregon was 371,040 in 2011 and 407,040 in 2010. About 91.6 percent was provided by ILECs and 8.4 percent was provided by CLECs (see Figure 14).

---

<sup>8</sup> **Revenues** – the cash inflows or equivalents from your operations during the year. *Excluded* are loan proceeds, shareholder contributions, and taxes that you billed to customers. *Included* are 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 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)**



### **C. VoIP Service**

Interconnected Voice over Internet Protocol (VoIP) Service is a service that enables real-time, two-way voice communications; requires a broadband connection at the user's location; requires Internet-protocol (IP) compatible customer-premises equipment (CPE); and permits users generally to receive or initiate calls that may originate or terminate, respectively, on the public switched telephone network (PSTN).

Oregon's total number of LEC-provided VoIP lines in 2011 was 69,099, all of which were provided by CLECs.

### **2. CLEC Provisioning of Private Line Circuits**

Twenty-nine (29) CLECs provided private line services by reselling ILEC services. Eight (8) 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 and data connectivity, including "plain old telephone service" (POTS), with new ones appearing with some frequency. Customers have replaced the relatively narrow bandwidth available using

modems and conventional telephone lines with data connectivity alternatives having much greater bandwidth, such as cable modems and cable facilities, digital subscriber lines (DSL), T-1 lines,<sup>9</sup> satellite data service, fixed or mobile wireless facilities.

The percentage of Oregon (residential and business) customers having high-speed digital access was 28.2 percent as measured by revenue. This consists of 8.8 percent private line services and 19.4 percent DSL services.

## VI. Market Segments by Region and Type of Service

The survey divided Oregon into six geographic regions. The regions are based on clusters of ILEC local exchange serving areas (see Figure 15). The six regions are: Portland Metropolitan,<sup>10</sup> Willamette Valley,<sup>11</sup> Southwest Interior,<sup>12</sup> Coast,<sup>13</sup> Central,<sup>14</sup> and East.<sup>15</sup>

---

<sup>9</sup> 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.

<sup>10</sup> The "**Portland Metropolitan**" region consists of the following exchanges: Aurora, Beaver Creek, 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.

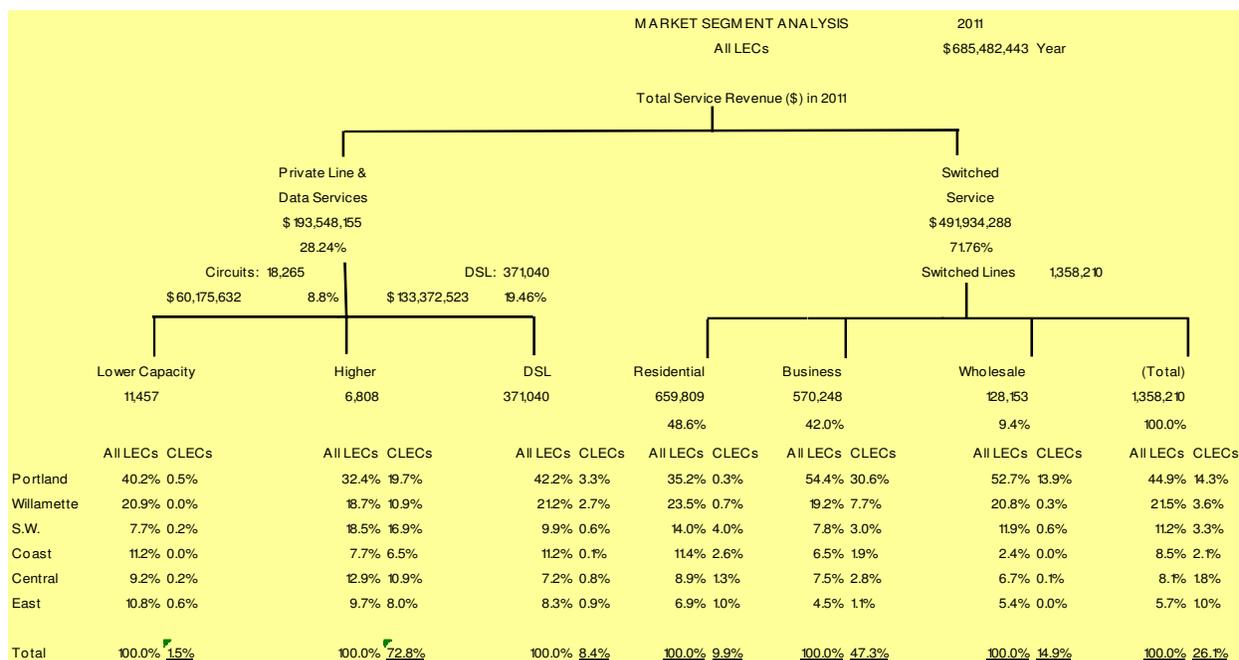
<sup>11</sup> The "**Willamette Valley**" region consists of the following exchanges: Albany, Alsea, Amity, Aumsville-Turner, Bellfountain, Blodgett, Blue River, Brownsville, Clatskanie, Corvallis, Cottage Grove, Creswell, Dallas, Dayton, Deadwood, Detroit, Drain, Eugene-Springfield, Falls City, Gervais, Government Camp, Grand Island, Grand Ronde, Halsey, Harlan, Harrisburg, Horton, Independence-Monmouth, Jefferson, Junction City, Lewisburg, 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.

<sup>12</sup> 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-Sutherland, O'Brien, Phoenix-Talent, Prospect, Riddle, Rogue River, Roseburg, Selma, Shady Cove, White City, Wolf Creek, and Yoncalla.

<sup>13</sup> 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.

<sup>14</sup> 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.

**Figure 15. Local Exchange Carriers Market Segments and Shares**



## 1. Market Segments by Region

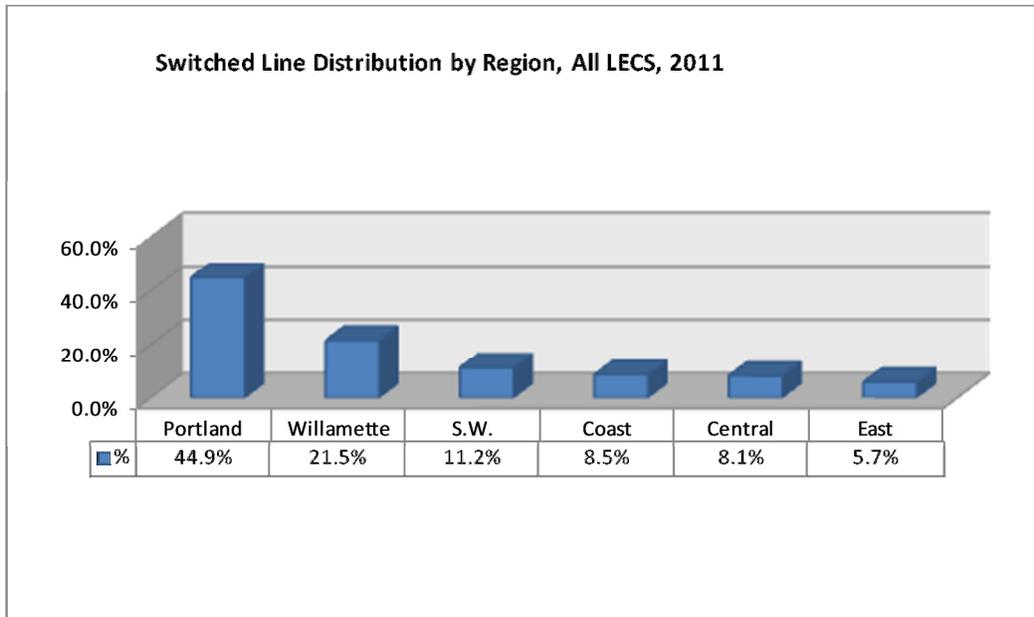
### A. Switched Services by Region

The survey asked each LEC to report the number of switched local exchange lines it supplied to customers in each region. Both ILECs and CLECs reported customers in all six regions. The Portland Metropolitan region, the most populous area of the state, continues to be the largest regional market. The Portland Metropolitan region is the largest regional switched access line market, with 44.9 percent (see Figure 16) of all local exchange switched lines in the state. The second largest region was the Willamette Valley region, with 21.5 percent of switched access line market. The other

<sup>15</sup> 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, Lone, 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.

four regions collectively accounted for one-third: Southwest Interior (11.2%), Central (8.1%), Coast (8.5%), and East (5.7%).

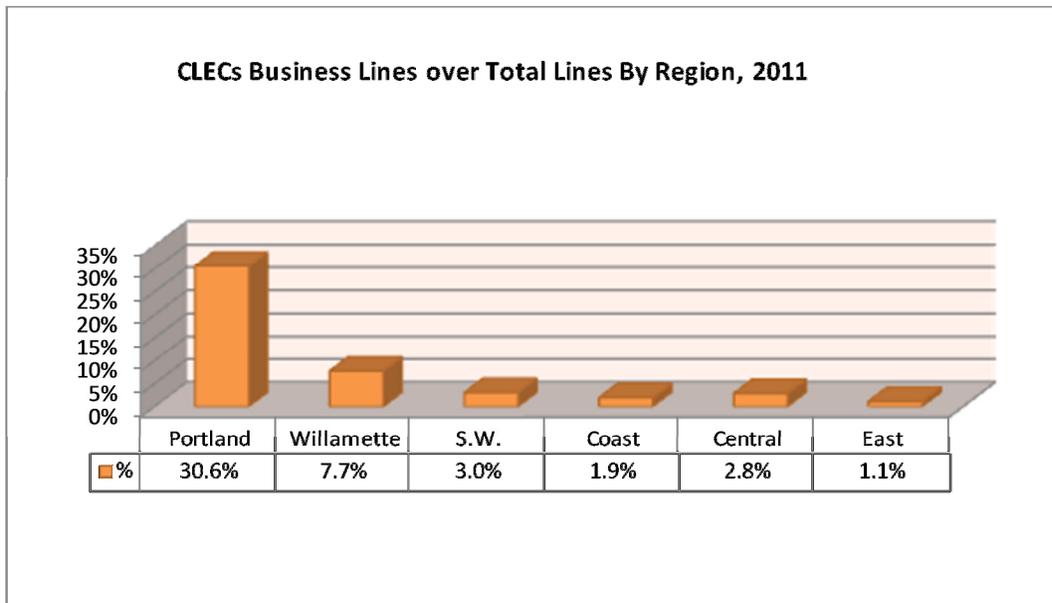
**Figure 16. Oregon LECs' Switched Lines by Region**



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 26.1 percent share of switched local exchange lines. For the Residential market, CLECs had 9.9 percent of lines in the state in 2011.

In the Business market, CLECs had 47.3 percent of lines in the state, and 30.6 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**

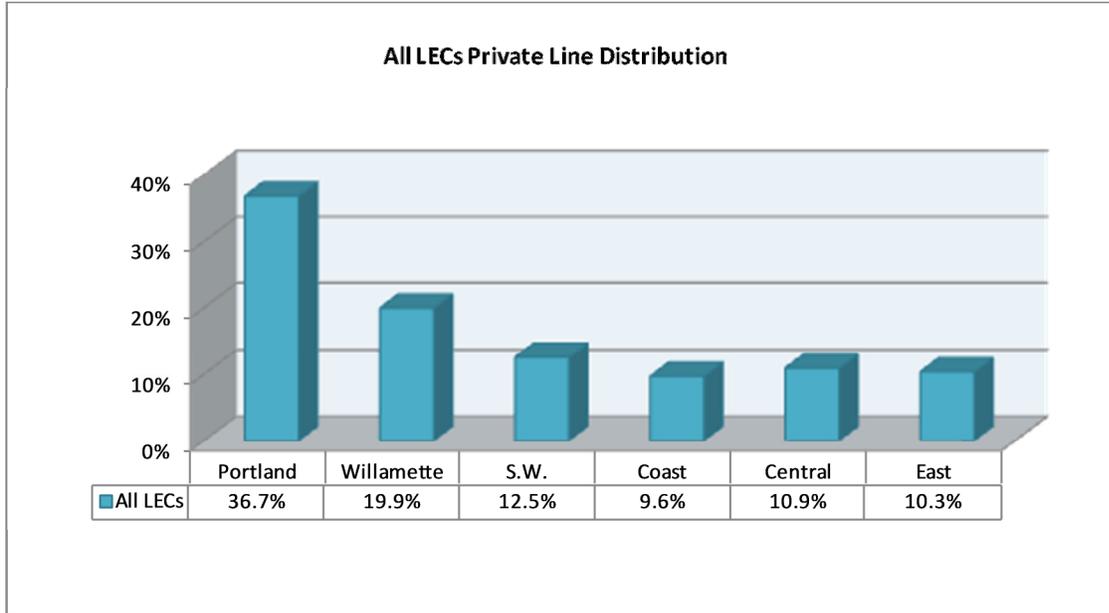


**B. Private Line Service by Region**

A private line is a dedicated, non-switched (or privately-switched) link between two or more customer-specified locations. Capacity is determined by the highest data transmission rate in either direction. Footnote 7 shows that Circuit is a termination you provide and bill to your customers for private line service. If you provide a circuit that connects two customer locations, and bill the customer for both ends of the circuit, this counts as 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.

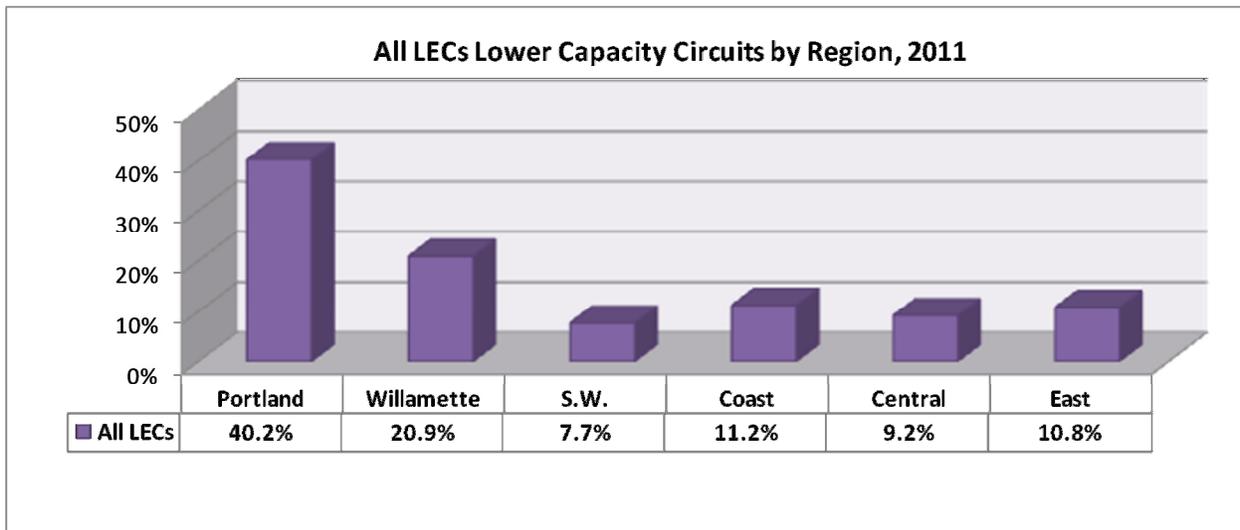
Please note: private line service by regions are measured by circuit terminations, not simply by circuits. The Portland Metropolitan region is the largest regional private line market, with 36.7 percent (see Figure 18) of all retail private line circuits in the state. The second largest region was the Willamette Valley, with 19.9 percent of private line circuits. The other four regions are Central (10.9%), Southwest Interior (12.5%), East (10.3%), and Coast (9.6%). (See footnote 7, private line service by region measured by circuit terminations.)

**Figure 18. Oregon Private Line Service both Lower & Higher Capacities by Region: 2011**



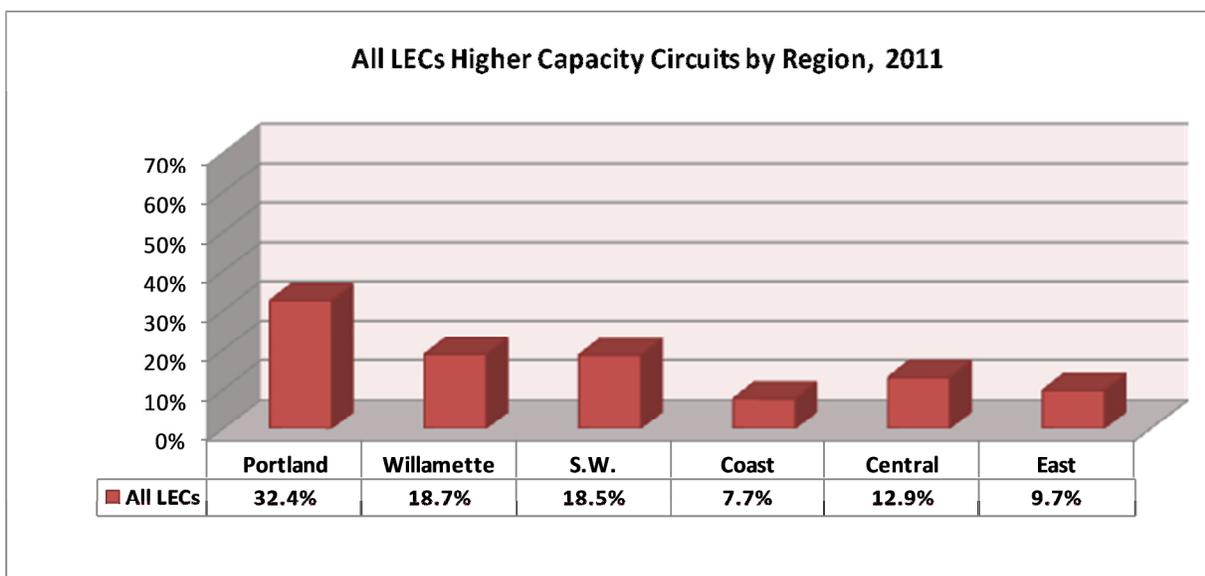
Of the state's 18,265 local exchange private line circuits, the majority (62.7 percent) were in the lower capacity category. The Portland Metropolitan region was the largest market for lower capacity circuits, with 40.2 percent (see Figure 19) of the lower capacity private line circuits in the state. The second largest market was the Willamette Valley region with 20.9 percent of lower capacity private line circuits, followed by the Central (9.2%), Coast (11.2%), Southwest Interior (7.7%), and East (10.8%) regions.

**Figure 19. Lower Capacity Private Line Circuits by Region: 2011**



Higher capacity private line circuits accounted for 37.3 percent of the state's total private line circuits. In December 2011, the largest market for higher capacity private line circuits was the Portland Metropolitan region, with 32.4 percent of the state's total (see Figure 20). The second largest market was the Willamette Valley region, with 18.7 percent of higher capacity private line circuits, followed by the Southwest Interior (18.5%), Central (12.9%), East (9.7%), and Coast (7.7%) regions.

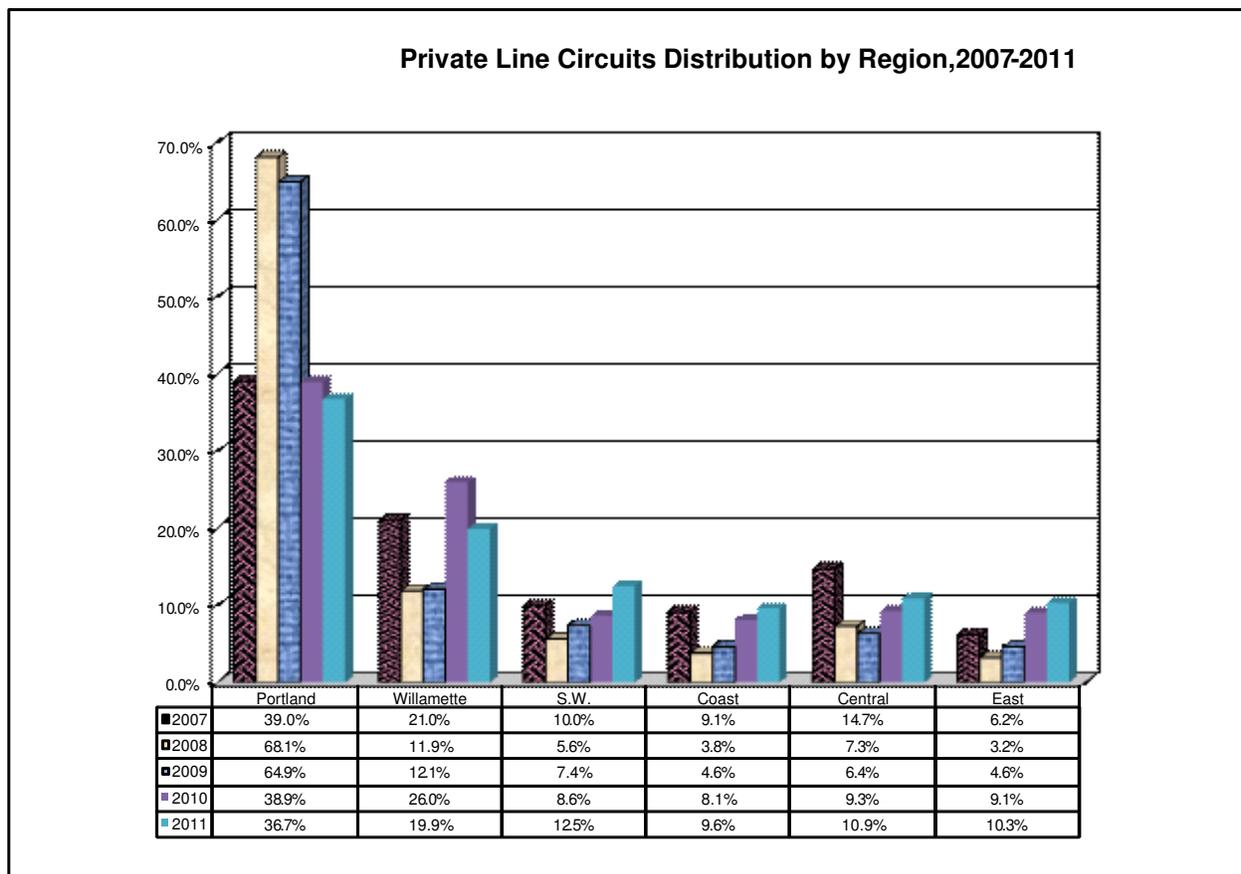
**Figure 20. Oregon Higher Capacity Circuits by Region: 2011**



CLECs' share of lower capacity circuits was 1.5 percent statewide. CLECs' share of higher capacity private line circuits was 72.8 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 total private line circuit terminations was 36.7 percent in 2011.

**Figure 21. Private Line Circuits Distribution: 2007 through 2011**

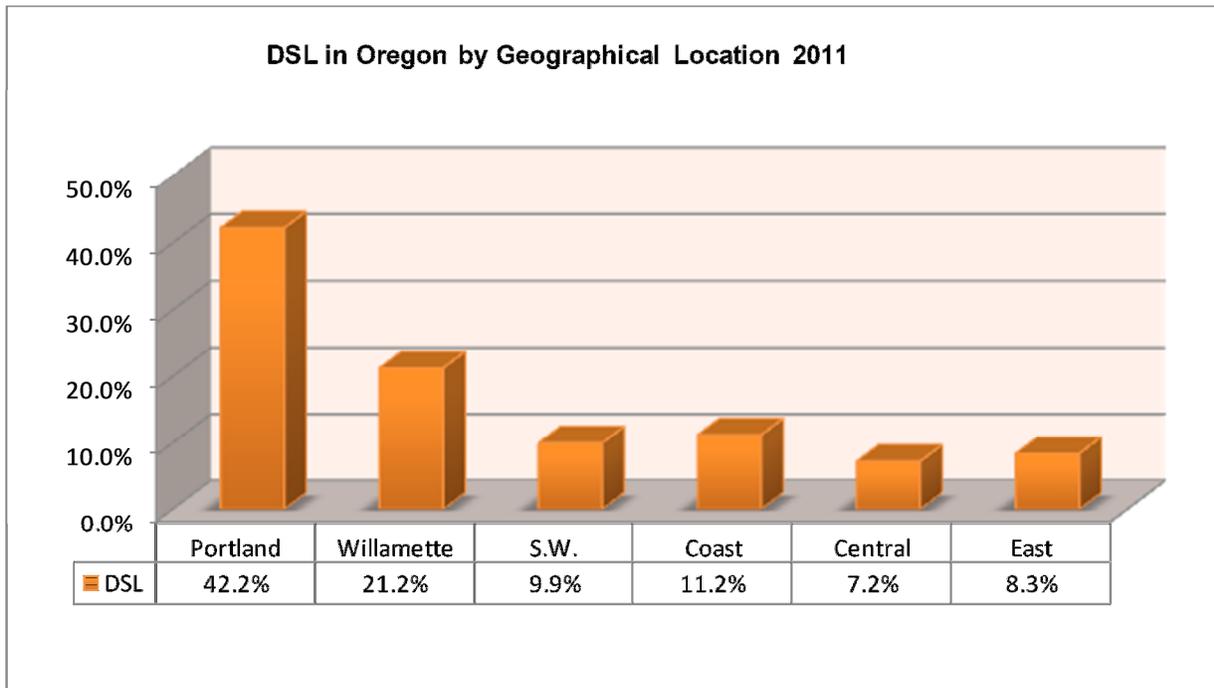


### C. DSL Service by Region

DSL (here referring to all types of digital subscriber lines) service was provided by 371,040 lines in 2011, and generated \$133.4 million in revenue. Of all DSL, 42.2 percent was in the Portland Metropolitan region (see Figure 22), followed by the

Willamette Valley (21.2%), Southwest Interior (9.9%), Coast (11.2%), East (8.3%), and Central (7.2%) regions.

**Figure 22. Oregon DSL by Region**

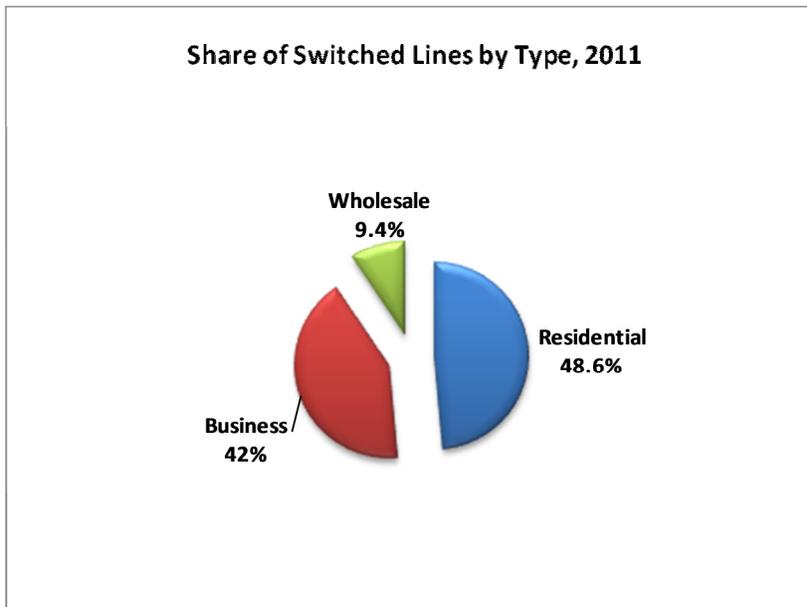


## 2. Customer Markets by Type of Service

### A. Switched Services

The survey grouped customers into three markets: residential, business, and wholesale. Approximately 49 percent of switched service lines were in the residential market, 42.0 percent were in the business market, and 9.4 percent were wholesale (see Figure 23).

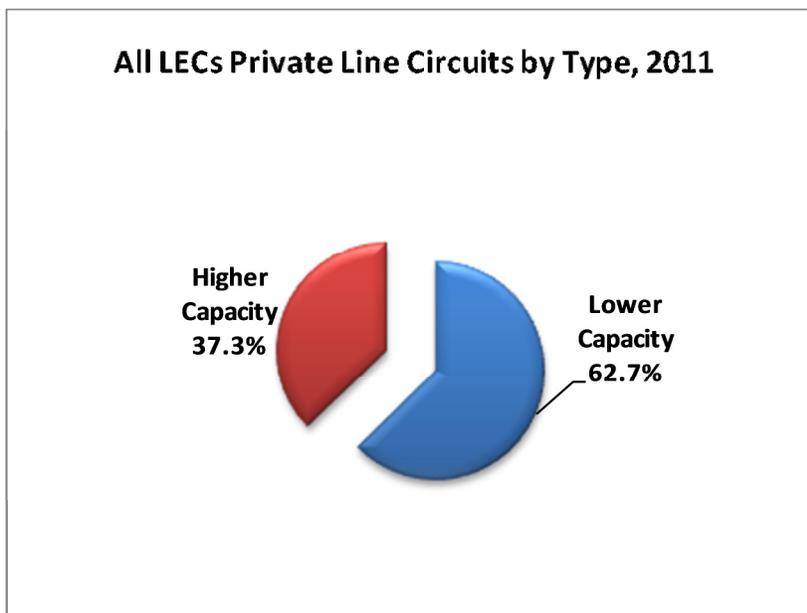
**Figure 23. Switched Service Lines by Market**



**B. Private Line**

Figure 24 shows that 62.7 percent of private line circuits were of lower capacity, and that 37.3 percent were of higher capacity.

**Figure 24. Oregon Private Line Circuits by Types**



### **C. DSL**

The landline phone companies have provided DSL service. In Oregon, DSL service provided 371,040 residential and business lines and accounted for \$133.4 million of revenue in 2011. Average DSL revenue per month was \$29.96 per line.

Observations in the media have included “Phone companies are losing the high-speed Internet game. In the second quarter, the landline phone industry lost broadband subscribers for the first time, as cable companies continued to pile on new household and small business customers;” “Cable providers now offer download speeds of 100 megabits per second in many areas, about 20 times faster than DSL;” and “Cable companies find it much easier and cheaper to provide fast Internet service compared to the digital subscriber lines, or DSL, that phone companies provide in most areas.” (Chicago Tribune © 08/14/2012) Oregon’s DSL market faces the same downward trend. DSL service declined by nine percent, to 371,040 lines in 2011 from 407,440 lines in 2010.

#### **Total High-Speed Digital Access in Oregon**

Four primary types of technologies are used to provide high-speed residential Internet access in Oregon: digital subscriber line (DSL) service, cable, satellite, and wireless (cellular).

DSL Internet access is provided by LECs using standard phone lines;

Cable Internet access is provided by providers of cable television over their facilities and requires a cable modem;

Satellite Internet access is provided by a satellite TV company;

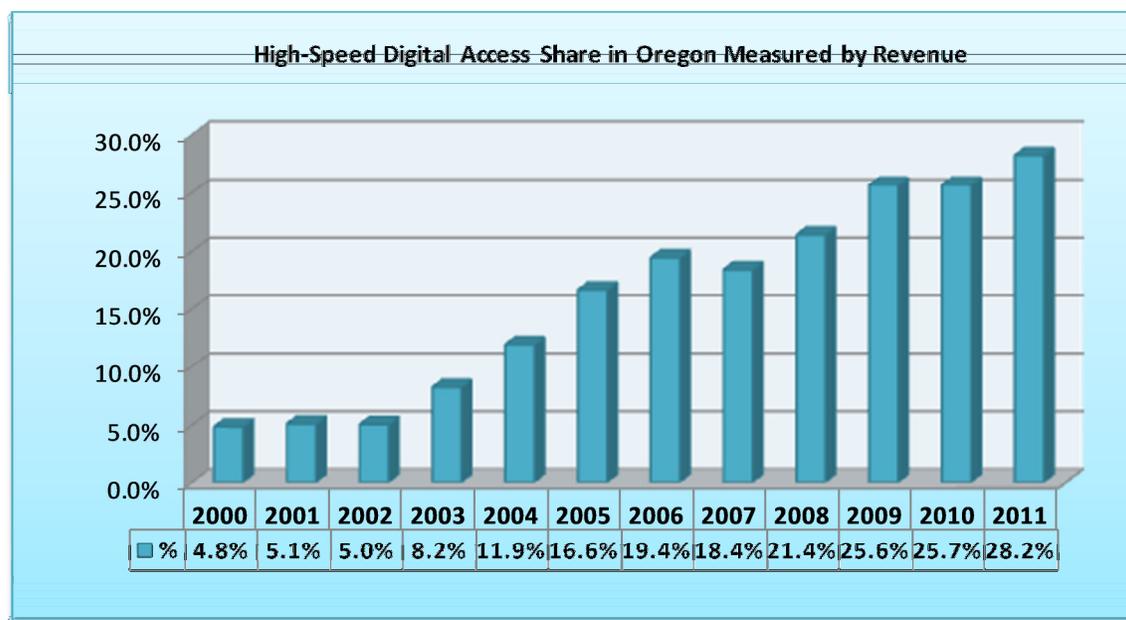
Wireless Internet access is provided by firms providing other wireless telecommunication services.

Telephone landline companies provide DSL High-speed digital Internet access service. The DSL and private line services accounted for 28.2 percent of total LEC’s revenue in 2011, this was an increase from 25.7 percent in 2010. The 28.2 percent revenue figure for high-speed access services consists of 8.8 percent from private line services, and 19.4 percent from DSL service.

High-speed digital Internet access used to be a dream for many Oregonians. Approximately 4.8 percent of Oregon customers (residential and business) in 2000 had Internet access 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 five percent in late 2000. The market share of high-speed digital Internet

access in Oregon was low at the time because of its limited availability. Eleven years later, penetration of high-speed digital Internet access in Oregon is approaching 30 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 telecommunication switches and fiber optic cable. The survey asked for information on investment in capital assets. Capital expenditures in 2011 associated with providing local exchange service in Oregon were estimated at \$180.3 million, which equates to 26.3 percent of total revenue (\$685.5 million) (see Table 11).

Of the 224 certified CLECs, 179 reported some level of capital expenditures in 2011, with 77.7 percent (139 of 179) having made capital expenditures totaling less than \$10,000. Total 2011 CLEC capital expenditures were \$66.6 million. CLECs' total 2011 capital investment represented 47.2 percent of CLECs' revenue (\$141 million).

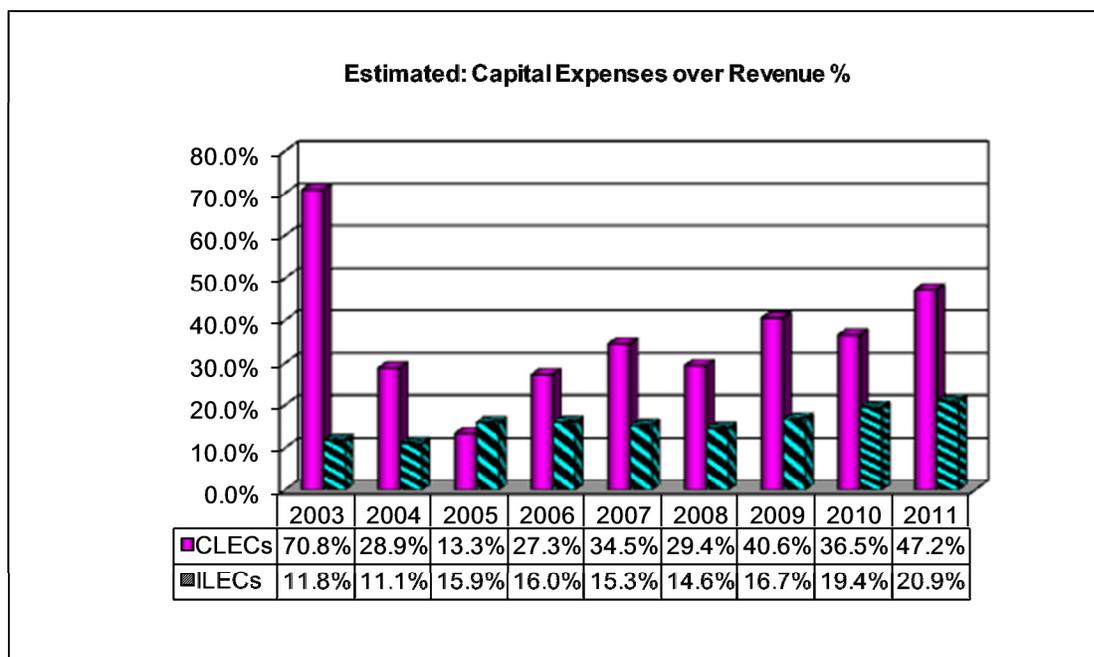
Each of the 32 certified ILECs reported capital expenditures in 2011. Total ILEC capital expenditures were \$113.7 million, which equates to 20.9 percent of ILECs' 2011 revenue (\$544.5 million).

**Table 11. 2011 Capital Expenditures for Local Exchange Service**

Capital Expenditures	ILECs	CLECs	All LECs
Less than \$10,000	2	139	141
\$10,000-50,000	3	7	10
\$50,001-100,000	2	5	7
\$100,001-1,000,000	10	17	27
\$1,000,001-10,000,000	11	10	21
More than \$10,000,000	4	1	5
<b># of LECs making Capital Expenditures</b>	<b>32</b>	<b>179</b>	<b>211</b>
<b>Estimated Expenditures (\$Millions)</b>	<b>\$113.7</b>	<b>\$66.6</b>	<b>\$180.3</b>
<b>Revenues (\$Millions)</b>	<b>\$544.5</b>	<b>\$141.0</b>	<b>\$685.5</b>
<b>Investment as % of Revenue</b>	<b>20.9%</b>	<b>47.2%</b>	<b>26.3%</b>

Figure 26 shows estimated capital expenditures as a percent of revenues. For example, CLECs' 2003 Oregon capital expenditures for local exchange service (i.e., not associated with the provisioning of other services such as wireless or long distance) equated to 70.8 percent of Oregon revenues. For ILECs this value was 11.8 percent. In 2005, CLECs' expenditure to revenue rate dropped to 13.3 percent, and ILECs' rate increased to 15.9 percent. For 2011, CLECs' capital expense to revenue ratio was 47.2 percent, while ILECs' corresponding value was 20.9 percent.

**Figure 26. Estimated Capital Expenditures as a Percent of Revenue**



## 2. Competition for Residential Market

The survey's K2 questions asked, "What do you believe are the reasons that you do not have a bigger share of Oregon's residential market (check all that apply)?"

Nineteen of 32 ILECs (59%) noted that cell phone usage has reduced the demand for wireline (including second-line) services (see Table 12), and nine ILECs said the lower residential customer density (than that for business) made providing residential services difficult or expensive.

Of the 206 CLECs who returned surveys, 127 answered the K2 questions, and 79 CLECs did not answer. Twenty-seven of the 206 responding CLECs said they could not compete on price (compared to 28 saying this in 2010), 22 said they could not compete on facilities, 17 said that the incumbent local exchange carrier has name familiarity, and 16 said that they did not have enough capacity. Since CLECs' operations focus principally on business customers, only 21 of the 127 CLECs responding to the question (16.5%) responded that cell phone usage has reduced the demand for residential wireline services, and 19 CLECs considered geographic location made competition for residential customers difficult or expensive.

**Table 12. Residential Market Competition: 2011**

Reasons	# of ILECs	# of CLECs
Cannot compete on price	5	27
Cannot compete on facilities	0	22
ILEC has name familiarity	0	17
Do not have enough capacity	0	16
Cell phone decreased the wireline demand	19	21
Hard to compete due to location	9	19
Other (explain):	20	110

Of the 110 CLECs who checked the "other" option, most stated they focused their activity on business customers or did not provide residential local exchange service in 2011. However, some of these 110 CLECs provided other reasons why they did not have a larger 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 “Competition.”
- Does not provide residential local exchange service due to “1) Excessive wholesale price in tier 2 & 3 markets, where ILECs sell finished retail products below wholesale costs. 2) ILECs do not provide services in a non-discriminatory fashion, fulfilling their orders to their retail divisions before fulfilling wholesale orders to us for the same type of service.”
- Does not provide residential local exchange service as “company's residential services are provided through wholesale partners and company is dependent on the marketing success of those partners.”
- “Don’t provide telecommunications services to the residential commercial market. Only provide database services, data processing, listing verification and data integration/aggregation solutions to various telecommunication service providers.”

Competition Survey  
Year 2012 Final Report

- Does not provide residential local exchange service because “UNE rates for DS0's are above ILEC retail phone rates.”
- “(Company)'s primary business model does not include voice service for residential customers; instead the Company's focus is to provide competitive alternative broadband, DSL, and VoIP services to small, medium, and enterprise businesses. To the extent that (company) provides residential DSL services, (company) provides those services either directly or through wholesale partners.”
- Company “spent hundreds of thousands of dollars to expand network and provide services at ridiculously low rates.”
- Company “is no longer actively offering telecommunications service in Oregon.”
- The company does “not compete in the residential market.”
- “Provide bundled calling plans on a leased facility-based platform.”
- Company “is a "carriers' carrier" and does not provide service directly to the end user.”
- Company “is a shared services provider for a single entity and has no plans to offer services in the residential market.”
- Company “provides resold competitive local exchange telecommunication services to business customers only.”
- “Currently not offering but plan on offering broadband only.”
- “Not interested in serving Oregon's residential market; only interested in broadband service within the City.”



## Competition Survey Year 2012 Final Report

There appears to be insufficient incentives for CLECs to compete with ILECs on a broad scale in the local residential market. CLECs provided 47.3 percent of business lines in 2011, indicating the larger margins potentially available in that market.

High-speed digital access accounted for 28.2 percent of total LEC revenue in 2011. This was an increase from 25.7 percent in 2010. The 28.2 percent revenue figure for high-speed access services consists of 8.8 percent from private line services and 19.4 percent from DSL.

Capital expenditures in support of providing local exchange service in Oregon in 2011 were estimated at \$180.3 million, which equated to 26.3 percent of total revenue (\$685.5 million). Capital investment by ILECs equated to 20.9 percent of ILEC revenues, while CLECs invested an amount equivalent to 47.2 percent of CLEC revenues.

In the residential local exchange market, 27 CLECs said they could not compete on price; twenty-two thought they could not compete on facilities; seventeen believed that the incumbent carrier's name familiarity was a barrier; sixteen answered that they did not have enough capacity; twenty-one responded that cell phone usage has decreased the demand for residential wireline and second-line services; and nineteen considered that geographic location made residential competition difficult or expensive.

Nineteen (19) of the 32 ILECs noted that increased cell phone usage has decreased the demand for wireline and second-line services, five could not compete on price, and nine ILECs were restrained by their geographic location, which made providing residential competition difficult or expensive.

While CLECs had a small percentage of the overall market, they achieved a significant presence in specific market segments. CLECs provided 47.3 percent of switched business lines. The predominant form of CLEC competitive entry was through the resale of an ILEC's or other CLEC's services. The largest 2011 CLEC market concentration was in the Portland Metropolitan region, where CLECs provided 30.6 percent of business lines.

CLECs have a 9.9 percent share of the residential market. CLECs' share of residential lines has increased from 0.7 percent in 1998 to 9.9 percent in 2011. The main driver of CLECs' residential share increase is the shrinking denominator; i.e., the decline in the number of residential landlines.

Residential landlines continue declining. ILECs' residential lines declined 59.4 percent, from 1,462,481 in 1998 to 594,205 in 2011. CLECs' residential lines increased 585 percent, from 9,576 to 65,604 over the same period.

As a result of competition from cable companies, Oregon LECs' digital subscriber line (DSL) declined by nine percent to 371,040 in 2011 from 407,440 in 2010.

New technologies have had a significant impact on telecommunications markets. The use of DSL, cable, satellite and wireless technologies to provide high-speed Internet access service are available to the market. These technologies have facilitated the introduction of products and services having significantly improved or new features. Historically, these new products and services have often replaced traditional telephony products and services.