The Status of Telecommunications Competition in Michigan

June 2009

Submitted by the Michigan Public Service Commission
Michigan Department of Energy, Labor & Economic Growth
In Compliance with Public Act 179 of 1991 as Amended

Introduction

Section 103 of the Michigan Telecommunications Act (MTA), as amended in November of 2005 (MCL 484.2103), directs the Michigan Public Service Commission (Commission) to submit an annual report describing the status of competition in telecommunications service in Michigan, including, but not limited to, the toll and local exchange service markets in the state. The MTA requires providers, except wireless carriers, to submit to the Commission all information necessary for the preparation of the annual report under this section. This ninth report filed by the Commission includes information on the traditional wireline industry as well as other telecommunications technologies.

As Michigan adjusts to the current economic situation so does the telecommunications industry. In addition, significant regulatory events have played a pivotal role in the levels of competition in Michigan over the past few years. In 2005, the Federal Communications Commission (FCC) and the courts overturned portions of the FCC's Triennial Review Order and eliminated the incumbents' obligation to provide the unbundled network element platform[1] (UNE-P) to competitors at a regulated cost-based price. Under the current MTA, telecommunications services are now largely governed by FCC requirements and market forces; the 2005 MTA revisions created only one form of retail local service subject to rate regulation, primary basic local exchange service.[2] The *Status of Telecommunications Competition in Michigan* report for 2008 finds that competitive providers, as well as incumbents, have experienced a decrease in their overall lines. However, competitive providers have continued to

[1] UNE-P is an unbundled network element platform or UNEs combined into a complete set in order to provide an end-to-end circuit. Some providers have opted to pay market-based rates for UNE-P until they have alternative arrangements in place to move those residential customers.

[2] Primary Basic Local Exchange Service (PBLES) is defined in the MTA as the provision of one primary aecess line to a residential customer for voiee communication and shall include (i) not fewer than 100 outgoing ealls per month (ii) not less than 12,000 outgoing minutes per month and (iii) unlimited incoming calls.

increase lines provisioned over their own networks, albeit the economic uncertainty, which correlates with the information the Commission reported last year.

Toll Markets

The long distance service is technically referred to as toll service and the providers of such services are referred to as interexchange carriers (IXCs). IXCs that own their own facilities are required to provide very little information to the Commission related to their operations. The Commission does not license IXCs. They are required only to file tariffs with the Commission that are consistent with the provisions of the MTA. IXCs providing toll service via resale[3] are exempt from even this tariff filing requirement. As a result, there is limited information available regarding market share, customer numbers, or revenues for IXCs.

In 2000, the FCC detariffed the interstate, domestic, interexchange services of nondominant IXCs. Detariffing means that long distance companies are no longer required to file a document called a "tariff" for purposes of notifying the FCC about the rates, terms and conditions of long distance service offerings. The FCC concluded that detariffing would enhance competition among providers of interstate, domestic and interexchange services, and promote competitive market conditions. After the transition period was completed, IXCs began providing service without filing tariffs with the FCC. They currently provide information to consumers via other means, such as their Web sites.

While the reselling of toll services is unregulated, the Commission has a registration process pursuant to MCL 484.2211a. Under this program, 254 carriers registered as resellers of toll service in Michigan for 2008. Although this is a self-registration process and is not subject to verification, it does indicate that there are numerous providers of this service. The

[3] Resale is buying long distance phone lines in quantity at wholesale rates and then selling them to the end user for a profit.

Commission's Web site provides a link for rate comparisons among providers. Additional information is available in the report the FCC issued in August 2008, *Trends in Telephone Service*. The FCC report indicates that from the end of 1999 to the present, the FCC has approved all the section 271 applications by the Bell Operating Companies (BOCs) to provide in-region interLATA[4] service throughout the United States.[5] In Michigan, this process was completed in September 2003. The FCC reports that more than 1,600 companies now offer wireline long distance service nationwide. These carriers remain subject to the FCC's jurisdiction. The FCC has chosen to rely on competition, rather than regulation, as much as possible. Thus, the FCC forbears from regulating most aspects of long distance service.

Effects of competition in the toll markets is evidenced by the number of optional toll package alternatives available, the number of providers who offer them and the declining prices for higher usage customers who do not utilize basic toll rates. Bundling of services and new pricing plans, as well as voice over internet protocol[6] (VoIP) have blurred the distinction between toll and local services. Many providers are offering unlimited local and long distance services, plus unregulated features, at one combined price. In some cases, these bundled services include wireless, Internet access services and video, commonly known in the marketplace as quadruple play.

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[4] InterLATA service means telecommunications between a point located within a LATA (local access and transport area, also known as a service area) and a point geographically outside that area.

[5] Section 271 of the Federal Telecommunications Act of 1996 describes the conditions that a Bell Operating Company (BOC) must satisfy to enter the market to provide interLATA services, long distance in particular, within the region where it operates as the dominant local telephone service provider.

[6] VoIP is the technology used to transmit voice conversations over a data network using the internet protocol. VoIP is discussed further in the Emerging Technologies section of this report.

Basic Local Exchange Market - Wireline

To obtain an accurate picture of the competitive marketplace in Michigan for basic local exchange service, the staff of the Commission conducts annual surveys of AT&T Michigan, Verizon, the smaller incumbent local exchange carriers (ILECs) as well as all licensed Competitive Local Exchange Carriers (CLECs). This survey includes ILECs that also operate as CLECs in Michigan as those lines provided in another ILEC's territory are considered competitive lines. CLECs are providers that compete in the same geographic area as ILECs. This year's survey was sent to the 40 ILECs and 203 CLECs in the state of Michigan that were licensed as of December 31, 2008. The data collected through this survey is for the year ended December 31, 2008. The information gathered assists the Commission in evaluating the scope of local competition in Michigan.

The surveyed companies consider some of the information requested to be confidential. Hence, the results of most portions of this survey are aggregated to total CLEC numbers to maintain the confidentiality of the individual company numbers. For 2008, all of the ILECs responded to the ILEC survey and 122 of the 203 CLECs and ILECs that have CLEC operations filed a response to the CLEC survey. From this group of CLECs, 67 reported that they are actually providing local service.

The data for 2008 show the total number of wirelines provided by ILECs and CLECs in Michigan was 4,286,071. This is a substantial decrease, over 600,000 fewer lines, from 2007. From the data compiled for 2008, staff found that the number of lines provided

by CLECs via their own facilities, through unbundled network element loops (UNE-L),[7] through Local Wholesale arrangements (LW), and through resale of incumbent providers' services was 859,370. CLEC lines accounted for 20 percent of the total lines in 2008. AT&T Michigan's share was 64.2 percent (2,750,538 lines)[8] while Verizon's share was 11.5 percent (491,303 lines). The small independent telephone companies represented the remaining 4.3 percent (184,860 lines) of the total lines in Michigan (*see* Figure 1).

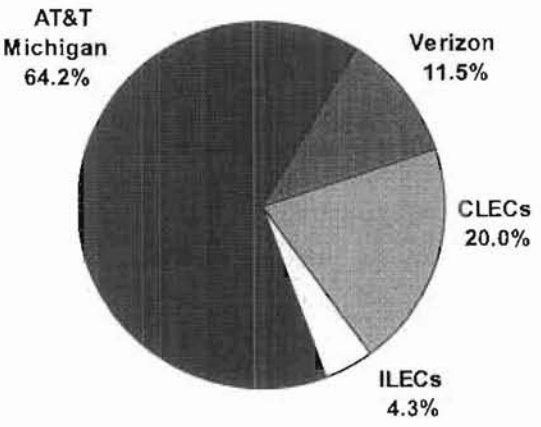

Figure 1: Michigan Market Share in 2008

The Commission continues to license new CLECs, and as of the end of 2008, CLECs were providing service to 20.05 percent of the wirelines provided to customers in Michigan. This is a very slight decrease from last year. On September 19, 2008, the FCC released its latest report to date on *Local Telephone Competition: Status as of December 31, 2007*. For the Michigan companies that are required to report this data to the FCC, the ILECs reported 3,895,173 lines, and the CLECs reported 892,684 lines, for a total of 4,787,857 lines. From the most recent data available from the FCC, the CLECs' share of Michigan's lines was 19 percent as of December 31, 2007. Seventy-eight providers reported data to the FCC, 26 ILECs along with 52 CLECs. Again this year, there was an increase in the number of CLECs reporting lines

[7] UNE-L is an unbundled network element loop and is a common strategy used by facilities-based CLECs. A CLEC owns the local switch and leases the local loop from the ILEC. Unbundled network elements (UNEs) are defined as physical and functional elements of the network, *e.g.*, Network Interface Devices, local loops, switch ports, and dedicated and common transport facilities.

[8] This is the number of lines as reported by AT&T Michigan, which includes the lines of the former AT&T Communications of Michigan, Inc. and TCG Detroit Holdings I, Inc.

to the FCC in compliance with the FCC reporting requirements. The chart of the Michigan survey results, Figure 2, categorizes the CLECs according to the number of customer lines that they served in 2008. The data indicates that of the 122 CLECs reporting, 55 (45 percent) were serving no Michigan customers in 2008. A second group of 32 CLECs (26 percent) served between one line and 1,000 lines. A third group served between 1,001 and 10,000 lines each and is comprised of 20 CLECs (16 percent), and the last group of CLECs served over 10,000 lines each and represents 15 CLECs (12 percent).

CLECs With No Lines	55	45%
CLECs With 1 – 1,000 Lines	32	26%
CLECs With 1,001 – 10,000 Lines	20	16%
CLECs With over 10,000 Lines	15	12%
Total CLECs Responding to Survey	122	100%

Figure 2: The 2008 Michigan Survey Results
Percentage total may not equal 100% due to rounding.

As shown in Figure 3, the number of CLECs with actual line activity in relation to the number of licensed CLECs decreased significantly in 2008, from 94 to 67. This is due, in part, to the impact of the lines loss experienced by the smaller CLECs.

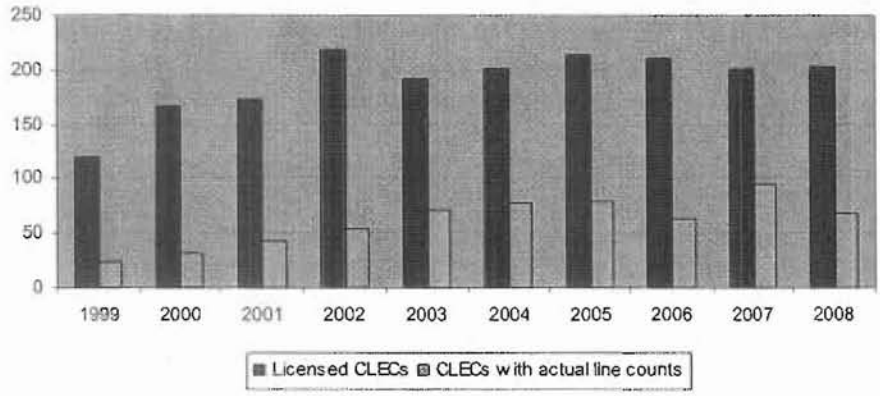

Figure 3: CLECs with lines in relation to licensed CLECs, as of 12/31/2008

The nearly half of the responding CLECs that report no line activity represent the number of licensed providers that are either not yet providing service and have no tariffs filed, or are providing services other than local, such as resold long distance. The Commission has a process in place to review, and revoke, licenses of CLECs not providing service in Michigan within a

reasonable period. In 2008, nine CLEC licenses were surrendered and 13 new CLEC licenses were issued. No licenses were revoked for the year.

Figure 4 represents a portion of the data gathered by the Commission over the last 10 years.

Year	Licensed CLECs	CLEC Replies	CLECs with Lines	CLEC Lines	Total Michigan Lines	CLEC %	AT&T Michigan %	Verizon %	ILECs %
1999	120	59	23	268,385	6,726,971	4.0	81.0	11.5	3.5
2000	167	69	31	446,164	6,901,813	6.5	78.0	12.0	3.5
2001	173	102	42	896,023	7,014,263	12.8	72.2	11.5	3.5
2002	219	113	54	1,447,176	6,668,124	21.7	62.9	11.9	3.6
2003	192	112	70	1,677,423	6,334,114	26.5	57.7	11.2	4.5
2004	202	127	77	1,681,173	6,103,250	27.5	56.9	11.8	3.7
2005	188	142	78	1,158,550	5,471,708	21.2	62.6	12.3	3.9
2006	210	116	63	961,460	5,260,443	18.3	65.5	12.3	3.9
2007	202	146	94	1,013,897	4,904,384	20.7	63.5	11.8	4.0
2008	203	122	67	859,370	4,286,071	20.0	64.2	11.5	4.3

Figure 4: Michigan Public Service Commission CLEC Survey Results

As is shown in Figure 4, while total wirelines have consistently decreased since 2001, the actual number of CLEC providers and CLEC lines in Michigan grew over the first six years that this information was gathered; the CLEC market grew from a four percent share to a peak of 27.5 percent share at the end of 2004. However, for 2005 and 2006, Michigan experienced its first decreases in CLEC lines. In 2007, Michigan's competitive lines rebounded and grew to slightly over a million lines. In 2008, CLEC lines decreased to below 2001 levels; however, the percentage of lines served by CLECs reflects only a minimal decrease in the CLEC market share from 2007. Along with the stable market share for CLECs over the past two years, another

positive trend is the continued growth in CLEC lines provisioned via CLECs' own facilities while CLEC lines provisioned via ILEC facilities have gradually decreased. This trend suggests that the competitive network infrastructure is, in fact, steadily shifting towards facilities-based competition versus competition reliant solely on the incumbents' networks. Again this year, this trend is more evident in the residential lines, where almost three-fourths of the lines provided via the CLEC facilities are residential customers. The residential and business lines provided via the incumbents' network is more balanced.

As reflected in Figure 5, the first six years that the Commission reported competitive lines, the number of CLEC lines provided over their own facilities was fairly constant. In 2005, an upward trend in these particular competitive lines began, and this trend has continued through 2008. The increase in this type of provisioned lines is noteworthy. In order to provide facilities-based services, the competitive provider must make additional significant investment, which is an indication that the provider has the intent of remaining in the marketplace for the long term. The decrease in the number of CLEC lines is likely due to a variety of factors including the FCC's elimination of UNE-P, competition from mobile wireless and cable providers, and the general economic climate. However, despite these line losses, the CLECs continue to invest in developing their own networks. The difference between the competitive lines provisioned via the incumbents' network and the competitive lines provisioned via the CLEC's own facilities is consistently

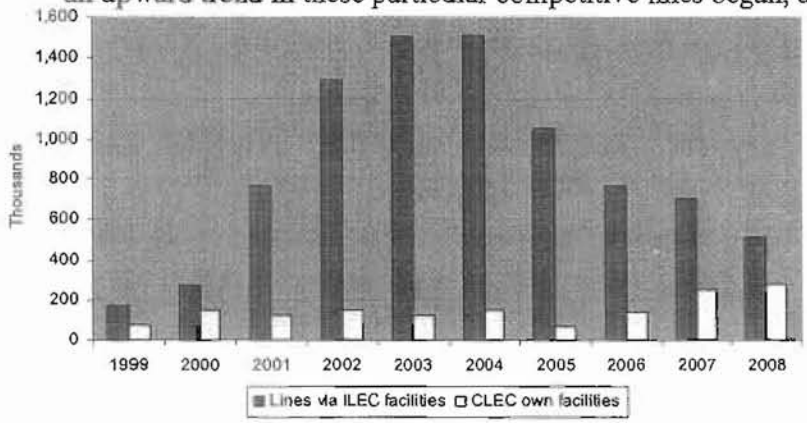

Figure 5: Competitive lines provisioned via CLECs' facilities.

smaller. Continued investment by CLECs in network infrastructure represents important economic activity that benefits Michigan and points toward further stabilization of Michigan's competitive telecommunications market in the future.

The graphical representation in Figure 6 depicts the evolution of the market share over the last 10 years. The chart indicates growth for the CLECs during the first six years while at the same time declining market share for AT&T Michigan. However, for 2005 and 2006, CLEC lines decreased while market share for AT&T Michigan grew slightly. In 2007, the competitive market share rebounded and remained stable for 2008. The Commission is encouraged that this may be indicative of further stabilization in the telecommunications marketplace after a few years of various unforeseen events such as the elimination of UNE-P as an economical method of provisioning customers, federal and court rulings as well as mergers. The market share for the small ILECs and Verizon has continued to remain fairly even over the 10-year period.

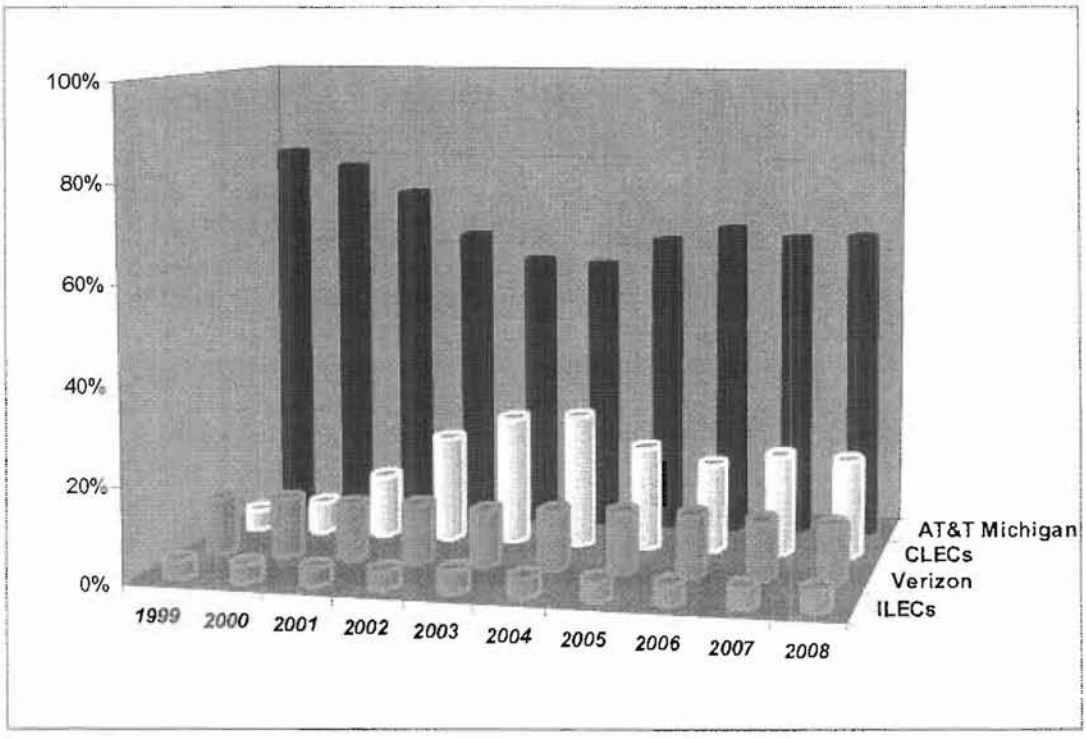

Figure 6: Michigan Market Share Evolution

As noted above, the total number of customer wirelines continues to follow a trend of decrease that began in 2002. Historically, providers have asserted that the decline in total wirelines was due to the increase in mobile wireless users[9] and the use of other types of telephony including VoIP; as well as a movement away from using dial-up Internet to high speed connections. As noted last year, the Commission believes there is merit in this argument, however the Commission again notes that many telecommunications companies are offering one or more of these additional services (wireless, VoIP, Internet connections) provided through their own company or an affiliate. Hence, the Commission reiterates its assertion that the decline in the total number of wirelines, by itself, does not represent a decline in the competitiveness of telecommunications providers in the marketplace in Michigan.

Mobile Wireless Market

Under the MTA, wireless providers are not subject to the Commission's jurisdiction. Consequently, in preparing this report the Commission must rely on wireless data obtained from other sources.[10] One such source is the FCC's semiannual Local Telephone Competition Report. This report

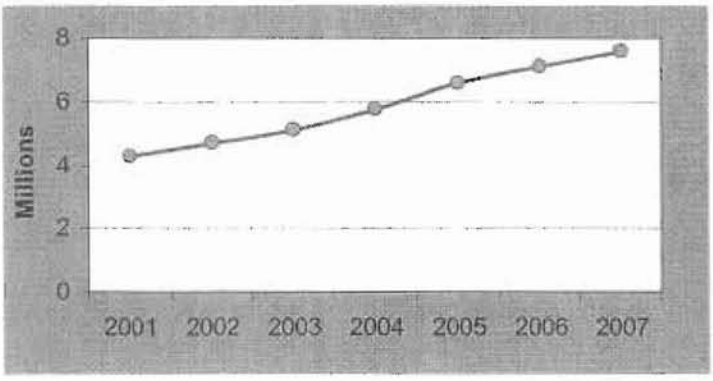

Figure 7: Number of Mobile Wireless Subscriptions in Michigan. FCC Data.

[9] For example, see the Wireless Market section of this report, which discusses the increasing number of wireless only households.

[10] While this report discusses the potential impact of the wireless market on wireline competition, it is not the contention of the Commission that mobile wireless service is a functional equivalent of fixed wireline service.

includes Michigan-specific data on the number of mobile wireless providers and subscribers. Unfortunately, the data from the FCC's most recent report is only current through the end of calendar year 2007. However, the data does show that the growth of mobile wireless continues to be a strong force in the telecommunications market today. The FCC's *Local Telephone Competition: Status as of December 31, 2007* shows that the number of mobile wireless subscriptions in Michigan continues to increase (*see* Figure 7). The FCC reports that there were 7,608,420 wireless subscriptions in Michigan as of December 31, 2007. This represents an increase of over 500,000 subscriptions from year-end 2006 (*see* Figure 8).

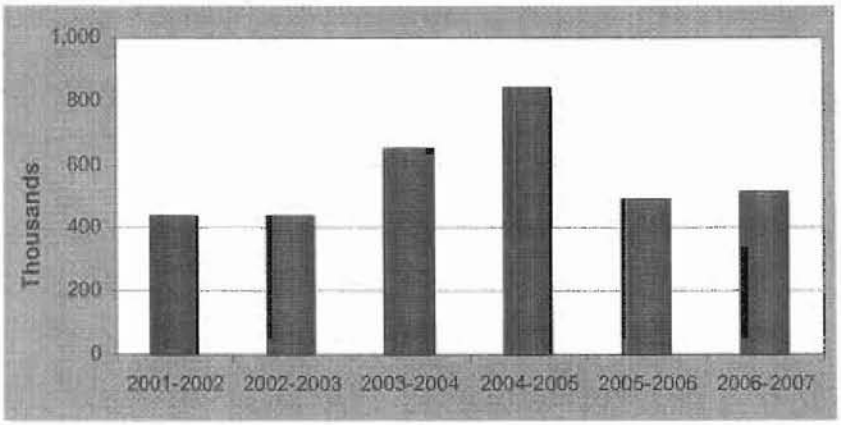

Figure 8: Change in Mobile Wireless Subscriptions in Michigan. FCC Data.

The FCC report shows that the number of wireless providers in Michigan has decreased from 12 in June of 2007 to 11 in December of 2007. Additionally, over the course of calendar year 2007 two important wireless mergers were announced, Verizon Wireless/Alltel on June 5, 2008[11] and AT&T/Centennial on November 7, 2008.[12] This report contains additional information about these mergers in the Mergers and Acquisitions section.

[11] *See* Verizon Wireless press release dated June 5, 2008.
[12] *See* AT&T press release dated November 7, 2008.

As noted in the past, the Commission does not consider mobile wireless to be a functional equivalent to wireline service for all customers. However, as the wireless industry grows, increasing geographical coverage and advancing developments in location technology for 911, wireless moves toward being a true competitive alternative for an increasing number of customers. The Centers for Disease Control and Prevention (CDC), released its *Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, July-December, 2008* on May 6, 2009. The report notes that 14.5 percent of American homes, representing approximately 35 million adults, receive all or most calls on a wireless phone, despite having a wireline phone. Additionally, the report estimates that for the second half of the 2008 calendar year, 20.2 percent of American homes had a wireless phone and did not have a wireline phone. This represents a continued increase in the number of wireless only households. While more customers are choosing to "cut the cord," wireless service is only a useful substitute for wireline service if adequate coverage exists for users to make and receive calls. Since rural areas tend to have limited and scattered populations, and consequently fewer wireless towers, it is important to try to gauge whether coverage exists for many areas of Michigan. Only if adequate wireless coverage is available to the majority of this state's customers, can wireless be a truly competitive substitute for wireline phone service in Michigan.

On January 16, 2009, the FCC released its *Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Radio Systems—Thirteenth Report* (CMRS Report). This report compiles data through the end of the 2007 calendar year and represents the FCC's most recent report in this area. One of the pieces of information the CMRS Report relies upon when analyzing wireless competition is penetration rate; that is, the percentage of the population in a given area that subscribes to mobile phone service. The FCC

collects information at the level of Economic Areas (EA), regional areas with borders defined by the Department of Commerce. Due to the large geographic area encompassed by Economic Areas, the FCC's data only allows for generalizing about wireless service in Michigan.[13]

Michigan counties make up all or part of six Economic Areas. The FCC reports that EA 57, which represents most of the eastern part of the Lower Peninsula and includes the metro Detroit, Flint, and Lansing areas, has achieved a penetration rate of 100% when calculated based on US Census 2007 estimated population data. The penetration rates for 2007 reported by the FCC for each of the Economic Areas containing Michigan counties are as follows:

EA 57 100%

Alcona, Iosco, Ogemaw, Gladwin, Arenac, Clare, Isabella, Midland, Bay, Saginaw, Huron, Gratiot, Tuscola, Sanilac, Clinton, Shiawassee, Genesee, Lapeer, St. Clair, Eaton, Ingham, Livingston, Oakland, Macomb, Jackson, Washtenaw, Wayne, Hillsdale, Lenawee, Monroe

EA 58 65%

Chippewa, Luce, Mackinac, Emmet, Charlevoix, Cheboygan, Presque Isle, Montmorency, Alpena, Oscoda, Crawford, Roscommon, Otsego

EA 59 85%

Keweenaw, Houghton, Baraga, Ontonagon, Gogebic, Iron, Marquette, Dickinson, Menominee, Delta, Alger, Schoolcraft . . . also includes portions of Wisconsin

EA 61 71%

Leelanau, Antrim, Kalkaska, Grand Traverse, Benzie, Manistee, Wexford, Missaukee, Mason, Lake, Osceola

EA 62 73%

Oceana, Newaygo, Mecosta, Montcalm, Muskegon, Ottawa, Kent, Ionia, Allegan, Barry, Van Buren, Kalamazoo, Calhoun, Branch

EA 65 74%

Berrien, Cass, St. Joseph . . . also includes portions of Indiana

While the penetration rates calculated for 2006 and 2007 are not directly comparable to the rates reported by the FCC for 2005,[14] there is evidence of continued growth in the number of

[13] Given, for example, that some of the areas overlap states and/or include both suburban and rural areas.

wireless subscriptions in both urban and rural areas. As shown in Figure 9, the wireless penetration rate has increased in each EA containing Michigan counties.

Economic Area	2005 (based on US Census 2000 population data)	2006 (based on US Census 2006 population estimates)	2007 (based on US Census 2007 population estimates)
57	85%	96%	100%
58	41%	56%	65%
59	63%	72%	85%
61	58%	66%	71%
62	63%	68%	73%
65	59%	67%	74%
Nationwide	71%	80%	86%

Figure 9: Wireless Penetration Rate.
Source: FCC Eleventh, Twelfth, and Thirteenth CMRS Reports

The FCC data showing increases in the wireless penetration rates should not be read as proof of coverage in all areas. Interactive provider coverage maps available on many mobile wireless providers' Web sites offer a better tool for determining the level of wireless coverage and determining whether mobile wireless service is a viable option for Michigan customers. Many of these maps can show detail of coverage at the level of individual street addresses, including where, for example, there may be "dead" zones.[15]

The FCC CMRS Report also contains maps showing wireless coverage. From the Commission's review of the FCC report and mobile wireless provider coverage maps, it appears that customers in the Lower Peninsula can expect to have decent wireless coverage with multiple providers offering coverage. Northern areas of the Lower Peninsula and the Upper Peninsula

[14] This is due to the FCC's use of U.S. Census 2000 actual population data to calculate 2005 penetration rates, whereas for the 2006 and 2007 penetration rates, the FCC used the U.S. Census 2006 and 2007 *estimated* population numbers, respectively.

[15] Even in geographic areas where there is coverage from a tower, some portions of the area may not have coverage due factors such as topography.

however still appear to lack the competition for mobile wireless service enjoyed by the southern Lower Peninsula.

Mobile wireless providers continue to upgrade their networks, offer new plans to their subscribers that include innovative bundles of wireless minutes and other services, and offer phones with features including the ability to act as a portable music player and access advanced multi-media content. Additionally, carriers are continuing to adopt new policies to become more competitive, including pro-rating early termination fees and making it easier for customers to use their choice of phone, including the ability to transfer the same phone between different mobile wireless providers.[16] Mobile wireless broadband technology continues to expand and many more customers are able to take advantage of high speed Internet connections coupled with mobility. As more customers "cut the cord" and give up wireline telephones, mobile wireless takes a stronger role in the telecommunications marketplace. As such, the Commission will continue to the best of its ability to monitor the ways in which mobile wireless service transforms competition for telecommunications services in Michigan.

Broadband Technologies

The Commission continues to monitor the development of broadband deployment and emerging technologies in the broadband realm such as VoIP, broadband over power lines[17] (BPL), and wireless broadband. The MTA as amended in November 2005 includes a registration requirement for providers of new or emerging technologies. The Commission maintains an

[16] There are two main types of technologies used to provide mobile wireless coverage in this country, with most mobile phones designed for only one type of technology. Thus, despite some providers' trends toward opening their networks to additional devices, there continues to be technical limitations on a customer's ability to transfer mobile phones among different providers' networks.

[17] Broadband over power lines refers to technologies for using electric utility companies' power lines to deliver broadband services.

online registration system, the *Intrastate Telecommunications Service Provider Registry*, to help providers meet this requirement.

Michigan continues to experience growth in the telecommunications-like services provided by VoIP technology. There are two main types of VoIP technology: interconnected VoIP technology, which allows a customer to make and receive calls from the public switched telephone network (PSTN); and non-interconnected VoIP technology in which calls do not use the PSTN, for example Skype or Vonage. Aside from companies that offer only VoIP services, many other types of companies are incorporating VoIP into their service offerings including cable companies, CLECs, ILECs, and long distance providers. Marketing literature available from a cross-section of these different types of providers shows that VoIP offerings include residential and business local and long distance calling, as well as features such as access to 911 service, international calling, voicemail, call forwarding, etc.

In the past few years, the Commission Staff has separately surveyed VoIP providers registered with the Commission in the Intrastate Telecommunications Service Providers (ITSP) registry to try to determine the number of VoIP customers and types of VoIP service available in Michigan. The VoIP survey has not yielded robust enough data to determine the total number of VoIP lines in Michigan. Because some registered VoIP providers did not respond to the voluntary survey and as the Commission is aware of VoIP providers that offer service in Michigan but are not currently registered in the ITSP registry,[18] there is a significant portion of the VoIP market that the Commission is unable to accurately analyze. Due to the limited response from the VoIP providers, the Commission has discontinued the separate VoIP survey for the current time.

[18] For example the Commission is aware of providers that are not registered in the ITSP that appear to provide non-interconnected VoIP service in Michigan.

However, the CLEC survey does collect information on the number of VoIP lines served by licensed CLECs and data from that survey shows that providers continue to expand the use of this technology as a method for serving customers. The survey results show 27,085 VoIP lines in Michigan, two-thirds of which serve business customers. While these numbers show slight growth in VoIP lines, the Commission is aware of additional interconnected VoIP service provided by affiliates of licensed CLECs on other platforms. These providers contend that interconnected VoIP is under the FCC's jurisdiction; hence there is no need to report the numbers to the Commission since the services are outside of Commission jurisdiction. The Commission has no way to determine the number of these additional VoIP lines; although the number potentially could be in the hundreds of thousands.

There are many issues of interest to the Commission related to VoIP, including federal universal service funding, 911 functionality and funding, and compensation for traffic exchange between providers. These and other VoIP issues are under the jurisdiction of the FCC and debate on these topics continues at the federal level. Any resulting federal action may affect telecommunications competition in Michigan; therefore, the Commission will continue to follow policy developments in this area.

High speed Internet access is necessary for customers to take full advantage of services such as VoIP, in addition to the host of other benefits high speed Internet offers. The MTA does not provide the Commission with jurisdiction over advanced services such as the provision of high speed Internet. However, especially in light of the broadband provisions of American Recovery and Reinvestment Act of 2009 (ARRA)[19] and other recent federal legislation,[20] the

[19] The ARRA was signed into law by President Obama on February 17, 2009.

Commission continues to monitor developments in this area and is committed to helping spur broadband deployment and adoption throughout the state of Michigan. For example, the Commission filed comments in multiple federal proceedings in 2008. These comments are available for review on the Commission's Web site. Additionally, the Commission has taken an active role in the proceedings surrounding the broadband provisions of the ARRA in the first half of this year. As these federal programs develop, the Commission will keep the Governor and legislature apprised of any required action on the State of Michigan's part. The Commission expects to be able to comment more comprehensively on the broadband provisions of the ARRA and any resulting effects on Michigan's telecommunications market in next year's report.

As noted, the Commission does not have jurisdiction over high speed Internet service providers/high speed Internet service offered by telecommunications providers. As such, the Commission must rely on external data sources when analyzing the state of broadband in Michigan. One important such source is the semiannual report compiled by the FCC, High Speed Services for Internet Access. The most recent of these reports, *High Speed Services for Internet Access: Status as of December 31, 2007,* compiles broadband data submitted on the FCC's Form 477 through mid-year 2007. According to this report, Michigan ranks 10th in the country in number of high speed lines, with just over 3.5 million lines (3,557,139). This is an increase of 1,126,270 lines from December 31, 2006 and an increase of 588,034 lines from June 30, 2006. This represents a continuation of the trend of rapid growth in the number of high

[20] The Broadband Data Improvement Act of 2008 was signed into law by President Bush on October 10, 2008. Among other things, the law directed the FCC and the Census Bureau to gather certain data related to broadband deployment and adoption.

speed connections in Michigan as shown in Figure 10. Residential customers represent 61 percent of the high speed lines in Michigan, while business connections totaled 39 percent.

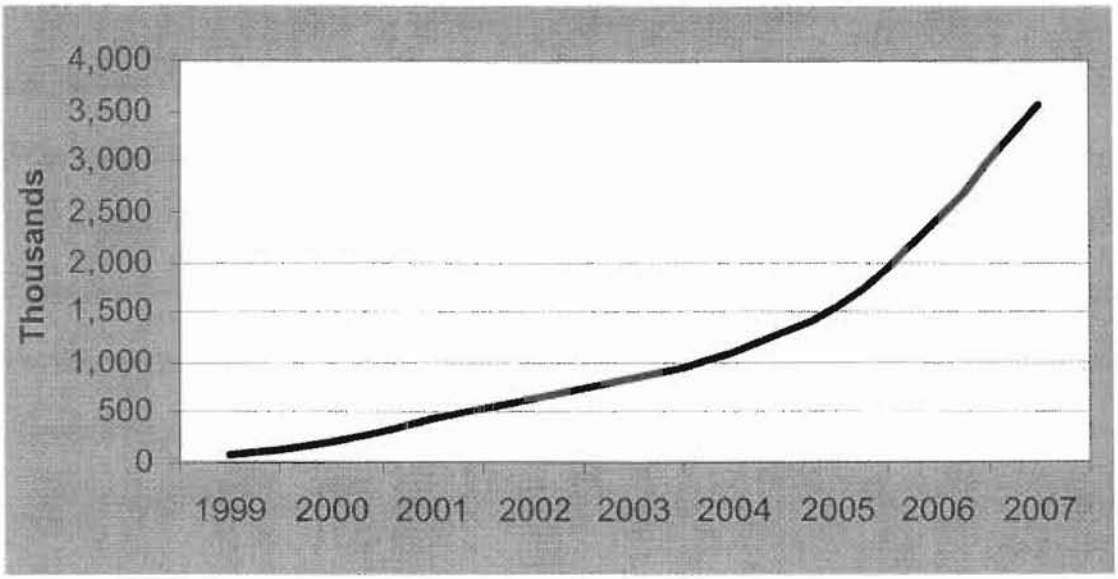

Figure 10: Number of High Speed Internet Lines in Michigan. (FCC Data)

The FCC's report also shows that there are 82 different providers of high speed lines in Michigan using one or more of the following technologies: digital subscriber line (DSL), traditional wireline technologies,[21] cable modem, fiber optic line, satellite, fixed wireless, and mobile wireless. The percentage of lines by technology[22] is shown in Figure 11. As of December 31, 2007, the FCC estimates that 71 percent of Michigan residences located in an ILEC's local phone service

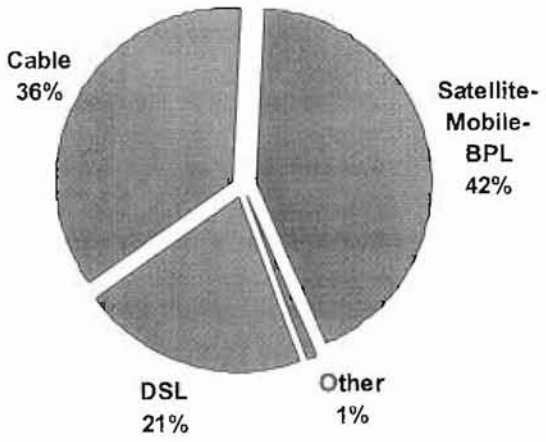

Figure 11: Percentage of High Speed Internet Lines by Technology in Michigan (FCC Data).

[21] Traditional wireline technologies used to provide equivalent Internet access functionality include T-carrier systems and Ethernet service over copper versus fiber-plant.
[22] In Figures 11 and 12, "Other" includes connections via traditional wireline, fiber, and fixed wireless.

area can receive digital subscriber line (DSL) service and that 98 percent of Michigan residences located in a cable provider's television service area can receive cable modem service. This compares to the nationwide percentages of 82 percent and 96 percent respectively.[23]

Figure 12 shows the growth in the number of high speed lines in Michigan by technology over the past three years. This figure illustrates the significant growth in the percentage of lines provided with satellite/mobile wireless/BPL technologies. While many customers in urban and suburban areas have access to many types of broadband services, options such as satellite and mobile wireless are often available to many rural customers who may not have access to wireline broadband connections. While the Commission is pleased to see growth of broadband availability through all platforms, the Commission is not convinced that satellite/mobile wireless broadband connections offer fully competitive alternatives to wireline technologies such as DSL and cable due to issues of latency and/or speed issues. Fixed wireless technologies, such as Wi-Fi,[24] are also used to provide broadband in Michigan markets. As noted in previous reports, Wi-Fi hot spots continue to increase in popularity in the private and public sectors.

[23] *See* FCC Report *High Speed Services for Internet Access: Status as of December 31, 2007,* Table 14.
[24] Wi-Fi is a marketing phrase that is short for wireless fidelity. Wi-Fi uses an over-the-air interface between a wireless client and a base station, or between two wireless clients, that is often used to connect computers to the internet in airports, hotels and coffee shops.

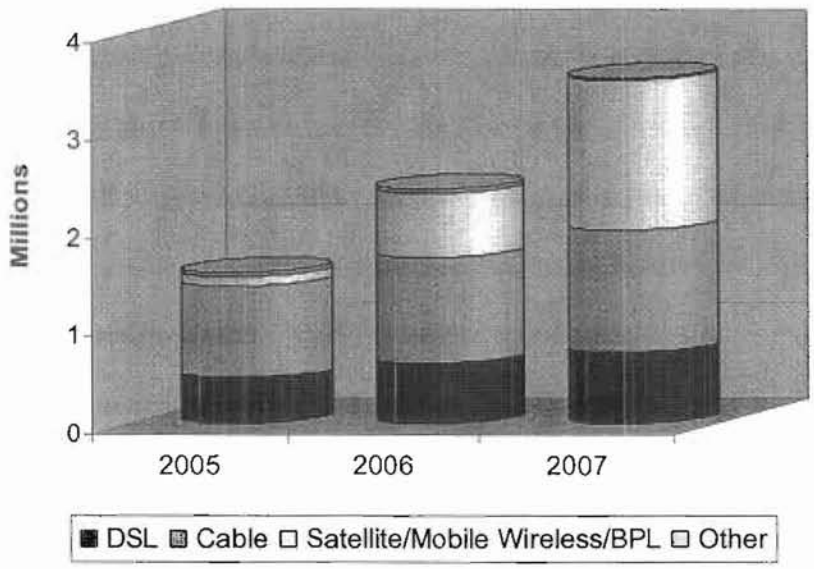

Figure 12: Number of High Speed Internet Lines by Technology in Michigan (FCC Data).

As noted in previous reports, BPL is often touted as a possible solution to providing additional connectivity particularly in rural areas. The Commission is aware of one BPL project currently active in Michigan. Midwest Energy Cooperative, headquartered in Cassopolis, Michigan, is working with International Broadband Electric Communications on a BPL project. According to Midwest Energy Cooperative's *BPL Web site*, deployment was to begin in January 2009. The Commission will continue to monitor and provide updates on the status of BPL projects in Michigan in future reports.

Additionally, the FCC reports that there are at least two providers of high speed Internet services serving in each zip code in Michigan. However, this does not necessarily imply that all customers have a choice of providers, or even have access to high speed lines at all, particularly those in rural areas. The FCC's report uses data collected on a version of FCC Form 477 that collected broadband data based on zip codes where providers offer service. For the purposes of

the High Speed Lines Report, the FCC considers an entire zip code 'served' by a provider if the provider had at least one subscriber whose billing address is within that zip code. This methodology has the possibility of overestimating the availability of broadband service.

In an effort to remedy criticisms of the High Speed Lines Report's conclusions, the FCC, on April 16, 2007, released a Notice of Proposed Rulemaking (NPRM) in WC Docket 07-38, *In the Matter of Development of Nationwide Broadband Data to Evaluate Reasonable and Timely Deployment of Advanced Services to All Americans, Improvement of Wireless Broadband Subscribership Data, and Development of Data on Interconnected VoIP Subscribership.* In the NPRM, the FCC asked for comment regarding how to improve Form 477 to facilitate the collection of more granular data with respect to connection speeds and locations where broadband is available. On March 19, 2008, the FCC issued an Order in this docket expanding the number of broadband reporting speed tiers, requiring providers to report numbers of broadband subscribers by Census Tract, further broken down by speed tier and technology type, and specifying additional requirements to improve the accuracy of information collected regarding mobile wireless broadband deployment. Providers began filing the revised Form 477 when reporting the calendar year 2008 data. Historically, there has been significant delay between the time providers file this data with the FCC and the release of the FCC's High Speed Lines Report. Therefore, the Commission is unable, at this time, to gauge the effectiveness of the revised Form 477 data, but is hopeful that future High Speed Lines Reports will include additional data from the new Form 477, thus addressing many of the criticisms of previous data. As with other federal actions relating to high speed Internet service, the Commission continues to monitor developments in this area.

There continues to be dynamic growth in the telecommunications market, much of which is centered on high speed Internet connections and services such as VoIP that rely upon them. The Commission will continue to monitor the number of VoIP customers, the status of broadband deployment, developments in emerging technologies, and any effects these industries may have on wireline telephone competition in Michigan.

Mergers and Acquisitions

While the past few years have brought the merger of large telecommunications providers in the wireline sector, 2008 brought the announcement or completion of larger mergers in the mobile wireless sector. Verizon Wireless announced completion of the merger with Alltel on January 9, 2009. As a condition for approval of the merger, the Department of Justice and the FCC required Verizon Wireless to divest certain Alltel and Verizon Wireless properties including the following Michigan properties:

- Alltel property--Muskegon, MI MSA (CMA 181): Muskegon and Oceana
- Verizon Wireless property--MI RSA 5 (CMA 476): Benzie, Lake, Leelanau, Manistee, Mason, Missaukee, Osceola, Wexford
- Verizon Wireless property--MI RSA 7 (CMA 478): Gratiot, Isabella, Mecosta, Montcalm, Newaygo

The completion of the merger makes Verizon Wireless the largest wireless carrier in the country. Verizon Wireless reports that the rebranding of Alltel to Verizon Wireless will occur in phases throughout 2009. [25]

The previously mentioned AT&T/Centennial merger is subject to FCC approval/conditions, though the companies expect the merger to be complete by the end of the second quarter of 2009.[26]

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[25] *See* Verizon Wireless press release dated January 9, 2009.
[26] *See* Centennial Communications press release dated January 9, 2009.

Also in 2008, there were three transactions involving CLECs in Michigan. On June 30, 2008, the FCC granted approval for the transfer of certain assets, including transmission, switching facilities and customers primarily in the Ann Arbor and Lansing markets, from CenturyTel Acquisition, LLC to Onvoy, Inc. d/b/a Onvoy Voice Services. On September 14, 2008, the FCC granted two authorizations involving Michigan transactions. The FCC granted authorization for Birch Telecom of the Great Lakes, Inc. to acquire the local and long distance customers of Navigator Telecommunications, LLC effective October 2008. The FCC also granted approval for an indirect transfer of control of GlobalCom, Inc. to First Communications, Inc. that did not involve any change of carrier for customers.

The results of the smaller CLEC transactions should not negatively affect competition for wireline service in Michigan, while the wireless mergers will significantly alter the wireless marketplace. The Commission continues to monitor industry mergers and acquisitions and will continue to address any impact upon the Michigan telecommunications market in future reports.

Conclusion

In 2008, Michigan's competitive market share decreased slightly to 20 percent. However, competitive lines provisioned via CLECs' own facilities have continued to increase amid the current economic difficulties. As discussed in this report, the increase in lines provisioned in this matter is noteworthy. In order to provide facilities-based services, the competitive provider must make additional significant investment, which is an indication that the provider has the intent of remaining in the marketplace for the long term.

The competitive landscape in Michigan has significantly changed over the last few years. Competition for basic local exchange service in Michigan prior to 2006 was based mainly on CLECs using local switching via AT&T Michigan's UNE-P at a regulated cost-based price to