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June 21, 2007

Honorable Jennifer Granholm
Governor of Michigan

Honorable Members of the Senate Energy Policy and Public Utilities Committee
Secretary of the Senate

Honorable Members of the House Energy and Technology Committee
Clerk of the House of Representatives

The enclosed annual report, *Status of Telecommunications Competition in Michigan*, is submitted on behalf of the Michigan Public Service Commission in accordance with Section 103 of the Michigan Telecommunications Act (MTA). This report will be available on the Commission website at www.michigan.gov/mpsc. The purpose of this report is to describe the status of competition in telecommunications services in Michigan, including, but not limited to, the toll and local exchange service markets in the state. This report includes information on the traditional wireline industry as well as services provided via diverse telecommunications technologies.

In 2006, the total number of wirelines in Michigan decreased by 3.9% from the 2005 line count. The percentage of lines in the wireline market for competitive providers is now at an 18.3% share, a 2.9% reduction from 2005. The decrease in the total number of competitive wirelines from 2005 to 2006 was 17%.

As mentioned last year, the Federal Communications Commission (FCC) and the courts overturned portions of the FCC's Triennial Review Order in 2005, and eliminated the incumbents' obligation to provide an unbundled network element platform (UNE-P) to the competitors at a regulated price. The competitors' transition away from a regulated UNE-P was completed in 2006. The Commission actively participated in the efforts to transition customers in a timely and efficient manner. Today, competitive providers have completed the transition of customers from UNE-P to other methods, such as unbundled network element-loop (UNE-L) provisioning which utilizes the incumbent's loop and the competitors' switching, or Local Wholesale Complete (LWC)/Wholesale Advantage, which uses the same infrastructure as UNE-P.

Additional data available to the Commission allows for the monitoring of other non-wireline telecommunications market developments. These areas are experiencing rapid growth.

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Wireless subscriptions in Michigan continue to increase; an additional 630,000 subscriptions were reported to the FCC for the 12 months between June 30, 2005 and June 30, 2006 for Michigan. High speed internet connections for the same period of time also increased. The FCC reports that as of June 30, 2006 Michigan had over 1.7 million high speed internet lines. The availability of broadband service affects the development of emerging telecommunications services such as Voice over Internet Protocol (VoIP) that rely upon the ability of the customer to access the internet with high speeds of information transfer. VoIP service in Michigan is being offered by many different companies – from cable television providers to traditional telecommunications companies. For certain telecommunications companies, some of the decrease in their wireline connections are somewhat offset by customers switching to wireless or VoIP service provided by the same company or one of its affiliates.

The *Status of Telecommunications Competition in Michigan* report for 2006 finds that many factors have had an impact on Michigan's declining levels of competition in the wireline market. The elimination of UNE-P, the emergence of new technology options, and the recent mergers involving incumbents and competitors have led to a continued decrease in competition in the wireline industry in 2006. It should also be noted that these factors are governed by outside forces, such as the FCC and courts, or are affected by the introduction of new technologies into the market that are not under the direct regulatory control of this Commission.

The Commission will continue to strive to meet its obligations under the MTA to ensure a just and reasonable PBLES rate; enforce basic consumer protections, including prohibitions against slamming and cramming; and resolve disputes that arise under the MTA. At the same time, the Commission will monitor new technology developments and any impacts on the competitive landscape in Michigan. The Commission will also apprise the Governor and the Legislature of any future developments that may warrant action.

Sincerely,

J. Peter Lark, Chairman
Michigan Public Service Commission

Monica Martinez, Commissioner
Michigan Public Service Commission

The Status of Telecommunications Competition in Michigan

June 2007



Submitted by the Michigan Public Service Commission
Michigan Department of Labor and 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. This section of 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 seventh report filed by the Commission includes information on the traditional wireline industry as well as other telecommunications technologies.

As mentioned last year, the Federal Communications Commission (FCC) and the courts overturned portions of the FCC's Triennial Review Order in 2005, and eliminated the incumbents' obligation to provide the unbundled network element platform¹ (UNE-P) to competitors at a regulated cost-based price. This transition was completed in 2006. 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 2006 finds, as in 2005, that the elimination of UNE-P as a method of provisioning customers, the continued emergence of new technology options, and the trend of mergers involving incumbents and competitors have all led to a continued decrease in competition in the wireline industry in Michigan.

¹ UNE-P is an unbundled network element platform or elements combined into a complete set in order to serve a customer. Some providers have opted to pay market-based rates for UNE-P until they have alternative arrangements in place to move those residential customers to either a resale or wholesale arrangement.

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

Toll Markets

The toll market is commonly referred to as long distance 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 resale³ 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 websites.

While the reselling of toll services is unregulated, the Commission has a registration process pursuant to MCL 484.2211a. Under this program, 243 carriers have registered as resellers of toll service in Michigan at the end of the first quarter of 2007. 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 Commission’s website provides a [Telephone Rate Information](#) page for rate comparisons among providers. Additional information is available in the report of

³ Resale is buying phone lines or service in quantity at wholesale rates and then selling them to the end user for a profit.

the FCC issued in February 2007, *Trends in Telephone Service*. The FCC report indicates that from the end of 1999 to the present, the FCC has approved all Section 271 applications of the Bell Operating Companies (BOCs) to provide in-region interLATA⁴ service throughout the United States.⁵ In Michigan, SBC, now AT&T received approval in September 2003. The FCC reports that more than 1,200 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 have blurred the distinction between toll and local services. Many providers are offering unlimited local and long distance services plus unregulated features for one price. In some cases, these bundled services include wireless and internet access services, as well as video and satellite television.

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

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 which a Bell Operating Company (BOC) must satisfy to provide interLATA services, long distance in particular, within the region where it operates as the dominant local telephone service provider.

CLECs in Michigan. CLECs are providers that compete in the same geographic area as ILECs. This year's survey was sent out to the 40 ILECs and 210 CLECs in the state of Michigan that were licensed as of December 31, 2006. The data collected through this survey is for the year ended December 31, 2006. The information was gathered to assist the Commission staff in evaluating the scope of local competition in Michigan.

The survey for 2006 was updated and expanded to request other information relevant to the status of telecommunications competition in Michigan. Some of the information provided in response to the survey is considered confidential by the companies. Hence, the results of most portions of the survey are reported in aggregate to maintain the confidentiality of the individual company numbers. For 2006, all of the ILECs responded to the ILEC survey, and 116 of the 210 CLECs and ILECs that have CLEC operations filed a response to the CLEC survey. From the group of CLECs, 73 reported that they are actually providing local service.

The survey findings indicate that the total number of lines provided in Michigan (all ILECs including AT&T Michigan, Verizon and CLECs) was 5,260,443. For 2006, the number of lines provided by CLECs (including over their own facilities, through UNE-L,⁶ residual

⁶ 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.

UNE-P, Local Wholesale Complete⁷ (LWC), and through resale of incumbent providers

services) was 961,460. As shown in

Figure 1, CLEC lines accounted for

18.3% of the total lines in 2006.

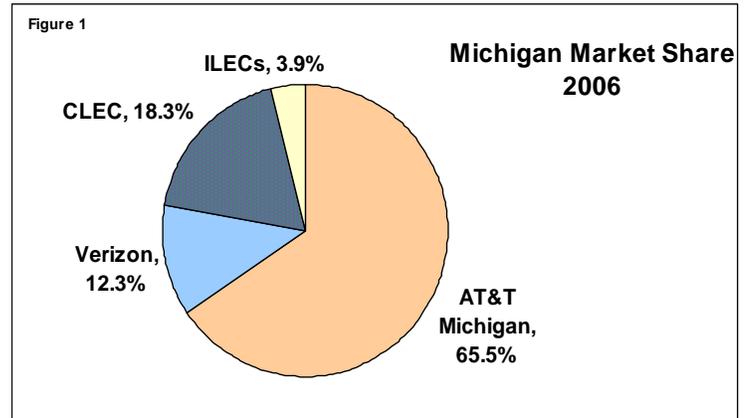
AT&T Michigan's share was 65.5%

(3,443,395 lines)⁸ while Verizon's

share was 12.3% (647,595 lines). The

small independent telephone

companies represent the remaining 3.9% (207,993 lines) of the total lines in Michigan.



The survey responses indicate that the geographic areas covered by CLEC lines continue to encompass primarily the Detroit, Grand Rapids, Lansing and Saginaw areas, with the majority of the competitive lines being provided in the Detroit vicinity. From the data that AT&T Michigan submitted, 60.1% of the competitive lines are provided in the Detroit area, 25.1% of the competitive lines are provided in the Grand Rapids area, 6.3% of the lines are provided in the Lansing area, 6% of the lines are provided in the Saginaw area, and 2.5% of the lines are provided in the Upper Peninsula area. It should be noted that most of the CLEC activity is in geographic areas that are served by AT&T Michigan, although we are seeing some growth of competition in the Verizon areas. CLECs provide approximately 4.4% of the competitive lines in Verizon's areas.

The Commission continues to license new CLECs, and as of the end of 2006, the CLECs were providing service to 18.3% of the wirelines provided to customers in Michigan. This

⁷ Local Wholesale Complete is AT&T Michigan's replacement offer for UNE-P, but at non-regulated rates. This category also includes Verizon's similar service called Wholesale Advantage.

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.

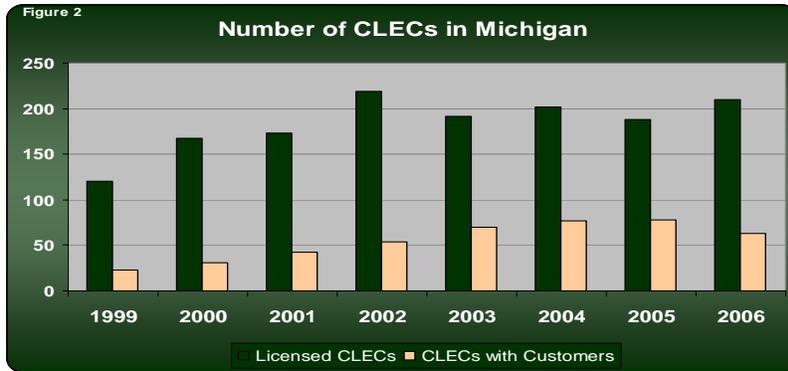
represents a continued decrease in the level of wireline competition that was first noted in 2005. This trend is consistent with data in the FCC report *Local Telephone Competition: Status as of June 30, 2006*. According to the FCC report, ILECs reported 4,490,783 lines, and the CLECs reported 992,598 for a total of 5,483,381 lines. The CLEC share was 18% of the total as of June 30, 2006. Twenty-three (23) ILECs and 50 CLECs in Michigan provided data to the FCC. This is an increase in the number of reporting companies because the FCC's rules have changed and now all ILECs and CLECs are required to report.

The table below showing Michigan survey results categorizes the CLECs according to the number of customer lines that they served in 2006. The data indicates that of the 116 CLECs reporting, 53 (approximately 46%) were not serving any Michigan customers in 2006. A second group of 26 CLECs (almost 22%) served between 1 line and 1,000 lines. A third group served between 1,001 and 10,000 lines each and is comprised of 20 CLECs for a 17% share, and the fourth group of CLECs served over 10,000 lines each and represents 17 CLECs for a 15% share.

The 2006 Michigan Survey Results Show That:

CLECs With No Lines	53	46%
CLECs With 1 – 1,000 Lines	26	22%
CLECs With 1,001 – 10,000 Lines	20	17%
CLECs With over 10,000 Lines	17	15%
Total CLECs Responding to Survey	116	100%

The CLECs that report no line activity represent a number of licensed providers that are not yet providing service and have no tariffs filed or they are providing services other than local,



such as resold long distance.

Figure 2 represents the number of licensed CLECs compared to the number of CLECs actually serving customers. The

Commission has a process in

place to review and revoke any license that is not actively being used over a reasonable period.

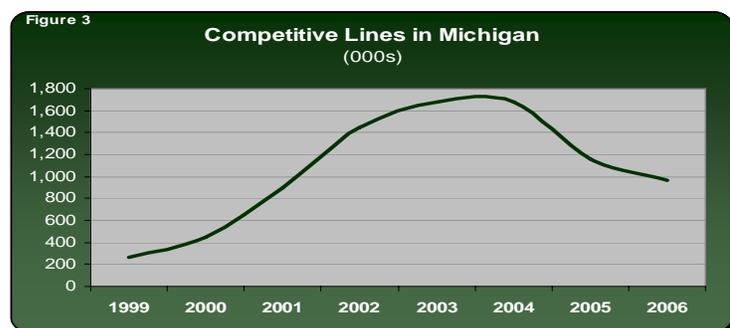
A portion of the data gathered by the Commission for the last eight years is presented below in table format.

Michigan Public Service Commission CLEC Survey Results:

Year	Licensed CLECs	CLEC Responses	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

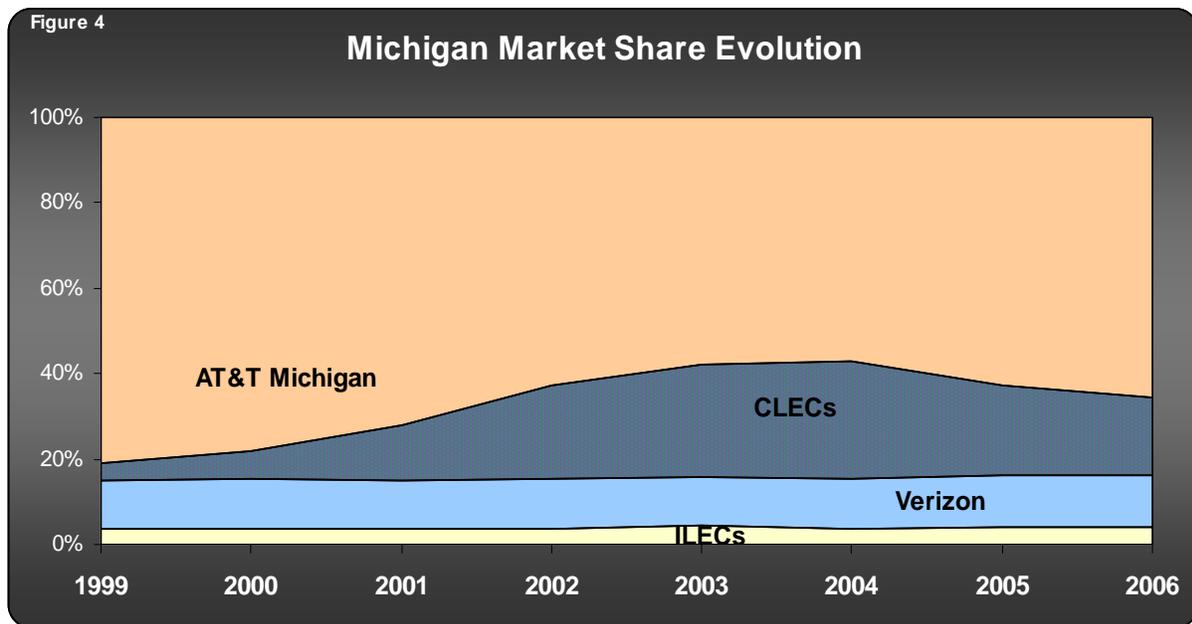
As shown in the table above, the actual number of CLEC providers and CLEC lines in Michigan grew from a 4% share to a 27.5% share at the end of 2004.

Since having peaked in 2004, Michigan CLEC lines have experienced a decrease as depicted graphically in Figure 3.



In 2006, there was a loss of 197,090 competitive lines, a 17% reduction in the number of competitive lines.

The following graphical representation (Figure 4) depicts the evolution of the market share over the last eight 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



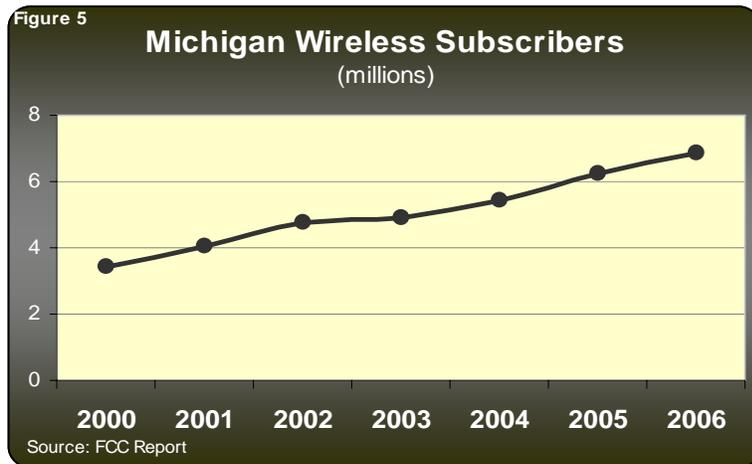
and 2006, CLEC lines decreased while market share for AT&T Michigan grew slightly. The market share for the small ILECs and Verizon remained fairly constant over the eight year period. Also of interest is that in 2006, the total number of customer wirelines decreased, a trend that began in 2002, reflecting the providers' claimed loss to mobile wireless and other types of telephony including voice over internet protocol (VoIP)⁹ as well as a movement away from using dial-up internet to high speed connections. However, for some telecommunications companies, a portion of the decrease in their wireline connections may be offset by customers switching to wireless or VoIP service provided by the same company or one of its affiliates.

⁹ VoIP is the technology used to transmit voice conversations over a data network using the internet protocol.

Wireless Market

Under the MTA, wireless providers are not subject to the Commission's jurisdiction.

Consequently, in preparing this report the Commission relied on wireless data obtained from the



FCC.¹⁰ The FCC's *Local Telephone Competition: Status as of June 30, 2006* report includes data from mobile wireless companies that offer service in Michigan. The data from this report shows that the number of

mobile wireless subscriptions in Michigan continues to increase (see Figure 5). Strong growth in this area is a trend that Michigan has experienced consistently in recent years. The FCC

reports that Michigan

had 6,872,249

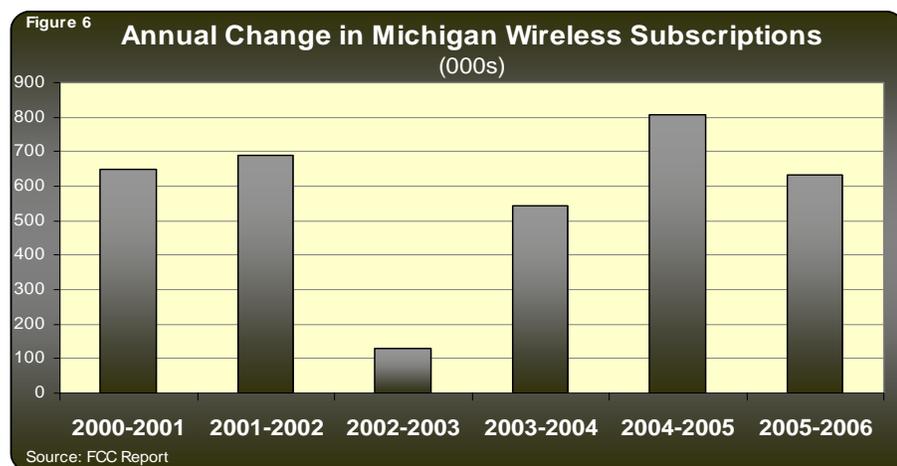
wireless subscriptions

as of June 30, 2006.

This amounts to an

additional 633,403

wireless subscriptions



from June 30, 2005 to June 30, 2006. While the increase during this period was more modest than the large increase seen over the previous year, the pattern of growth is still strong (see Figure 6).

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.

The number of mobile wireless providers that also have lines in Michigan has decreased. In 2005 Leap Wireless sold its Michigan assets to Verizon Wireless and Nextel merged with Sprint forming Sprint-Nextel. Michigan did gain one new provider, Metro PCS, Inc., that began serving the metro Detroit area in 2005. Notwithstanding this net loss of one provider, the growth of mobile wireless is a strong force in the telecommunications market today; an example of this is discussed in the broadband section of this report where we see enormous growth of mobile wireless as a source for broadband connections.

On September 29, 2006 the FCC released its *Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Radio Systems—Eleventh Report* (CMRS Report). This report compiles data for the 2005 calendar year and is the FCC's most recent report in this area. The CMRS Report relies upon penetration rate to analyze wireless competition; that is, what percentage of the population in a given area subscribes to mobile phone service. The FCC collects geographic information for Economic Areas (EA), which are regional areas whose borders are defined by the Department of Commerce. Detail by county would be very useful for analyzing Michigan's penetration rates;¹¹ however, data at this level of geographic detail is not available. The FCC's data, therefore, only supports making generalizations about wireless service coverage in Michigan.

Michigan counties make up all or part of six Economic Areas. Area 57 which represents most of the eastern part of the Lower Peninsula and includes the metro Detroit, Flint, and Lansing areas has a penetration rate of 85%, well above the national average of 71% as calculated by the FCC. However, this is the only Economic Area in Michigan that has a penetration rate greater than the national average. When we juxtapose the high penetration rate of Area 57 with the penetration rate of Area 58 (made up of northeastern Lower Peninsula and

¹¹ Given, for example, that Area 59 includes both the Green Bay, Wisconsin area, a suburban area, with very rural areas in the western part of the Upper Peninsula.

eastern Upper Peninsula counties), which has the lowest reported penetration rate in the country, we can see how acutely urban versus rural settings impact wireless service subscriptions. The penetration rates for each of the Economic Areas containing Michigan counties are as follows:

EA 57	85%
<i>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</i>	
EA 58	41%
<i>Chippewa, Luce, Mackinac, Emmet, Charlevoix, Cheboygan, Presque Isle, Montmorency, Alpena, Oscoda, Crawford, Roscommon, Otsego</i>	
EA 59	63%
<i>Keweenaw, Houghton, Baraga, Ontonagon, Gogebic, Iron, Marquette, Dickinson, Menominee, Delta, Alger, Schoolcraft . . . also includes portions of Wisconsin</i>	
EA 61	58%
<i>Leelanau, Antrim, Kalkaska, Grand Traverse, Benzie, Manistee, Wexford, Missaukee, Mason, Lake, Osceola</i>	
EA 62	63%
<i>Oceana, Newaygo, Mecosta, Montcalm, Muskegon, Ottawa, Kent, Ionia, Allegan, Barry, Van Buren, Kalamazoo, Calhoun, Branch</i>	
EA 65	59%
<i>Berrien, Cass, St. Joseph . . . also includes portions of Indiana</i>	

The FCC CMRS Report also addresses rollout of next generation technology. These technologies allow for higher speeds of information transfer and allow advanced video and internet content to be accessed. The majority of the Lower Peninsula is covered by some form of next generation technology.¹² There are some areas around the metropolitan Detroit, Lansing, and Grand Rapids areas that are covered by even more advanced technologies. Only two areas of

¹² Kalkaska and Montmorency Counties do not have next generation coverage.

the Upper Peninsula, portions of Menominee County and Mackinac County, have next generation technology rollout.

The FCC data regarding penetration rates tallies subscribers with billing addresses in these zip codes. This does not mean that coverage exists in all (or even many) areas of these counties.¹³ It is therefore important to try to find another measure of wireless coverage. Provider coverage maps¹⁴ are an additional tool to help determine where mobile wireless coverage exists in Michigan. Interactive maps with high levels of detail are available on many carrier websites. These types of maps are useful for customers because they show detail of coverage for individual street addresses, and where, for example, there may be “dead” zones.¹⁵ The broader region maps, used by the FCC, can only give a general idea of where coverage exists. Many providers offer differing levels of coverage depending on the plan a subscriber chooses.

From the Commission’s review of data related to coverage areas, it appears that most areas of the Lower Peninsula have adequate coverage, though customers in some rural areas may have difficulty with signal strength. Aside from the few larger cities, subscribers in the Upper Peninsula do not have the same signal strength that many subscribers of the Lower Peninsula have. Again, this review considers provider plans that include nationwide coverage. This level of coverage is not necessarily available for all features or with all wireless plans.¹⁶

¹³ For example, some wireless phone users may rely on their wireless phone only during travel, etc. where they would be outside of their county of residence and would not rely on having a cellular signal in their homes. In these areas wireless would not likely be a direct competitor to wireline service.

¹⁴ Coverage maps can be found on the wireless providers’ websites. For examples of the coverage maps of a national, a large regional, and a smaller regional provider see the maps provided by *SprintNextel*, *Alltel*, or *Dobson*. Other providers offer similar maps on their websites.

¹⁵ Even in areas where there is coverage from a tower, some portions of the area may not have coverage.

¹⁶ For example, the Nextel portion of SprintNextel’s network is not available in the Upper Peninsula and is very limited in the northern portion of the 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 such as the ability to act as a portable music player and access advanced multi-media including internet and video content. While it remains the case that few customers of these services have “cut the cord,”¹⁷ it is very probable that mobile wireless is having some impact on telecommunications competition in Michigan. Given these types of innovations and the continued increases in the number of subscribers to this kind of service, the Commission will continue to monitor, to the best of its ability, how the wireless market affects wireline competition in this state.

Emerging Technologies

The Commission continues to monitor the development of emerging technologies in the broadband realm such as VoIP, Wi-Fi¹⁸ technology, WiMAX¹⁹ and Broadband over Power Lines (BPL).²⁰ The MTA was amended in November 2005 to add a registration requirement for providers of new or emerging technologies.

VoIP is one emerging technology that may begin to affect telecommunications competition in Michigan. Many types of companies are incorporating VoIP into their service offerings including companies that offer only VoIP service, cable companies, CLECs, and ILECs.

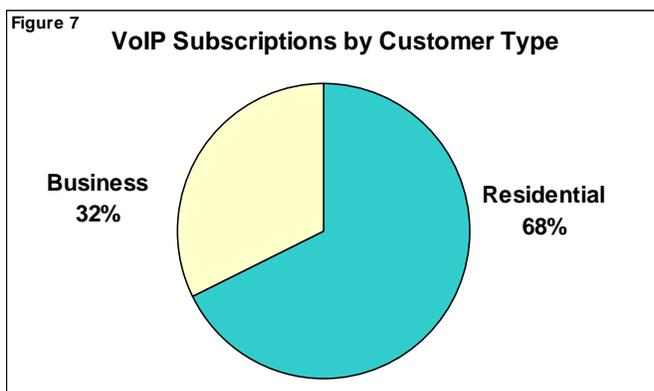
¹⁷ That is, customers who use mobile wireless (or other technologies) for all of their telecommunications needs and no longer subscribe to either local or long distance landline service.

¹⁸ 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.

¹⁹ WiMAX, which stands for Worldwide Interoperability for Microwave Access, can carry data at a potential speed of 70 million bits per second in a radius of up to 31 miles.

²⁰ Broadband over Power Lines refers to technologies for using electric utility companies' power lines to deliver broadband services.

The MTA as amended in November 2005 requires providers of VoIP technology to register with the Commission via the *Intrastate Telecommunications Service Provider* (ITSP) registry. Again this year, a survey was sent to each of the companies registered as a VoIP provider in the ITSP registry. Of the 53 registered providers, 26 responded to the survey. Seven of these reported having VoIP customers as of December 31, 2006. Providers who are registered as CLECs are also surveyed about their VoIP customer numbers. Seven of these companies reported VoIP customers: a total of 14 companies reported VoIP customers. The responding providers who were serving customers in 2006 offered a mix of residential and business services including local and long distance calling, as well as features such as international calling, voice mail and call forwarding, among others. The results of the survey indicate there are



approximately 47,000 known subscriptions to VoIP service in Michigan, 68% of which are residential (*see* Figure 7). All of the responding providers who are registered as VoIP providers offer some form of 9-1-1 service.²¹

These numbers more than likely underestimate the total number of VoIP customers in Michigan. Some registered VoIP providers did not respond to the voluntary survey, and the Commission is aware of other VoIP providers, such as Vonage²² or Skype, that are not currently registered in our database. However, the data available to the Commission does show an

²¹ This question was not posed to providers who are registered as CLECs, only to those who are registered as VoIP providers.

²² In March of this year a federal jury found Vonage to be in violation of patents held by Verizon. It is possible that the result of these proceedings will affect Vonage's ability to offer service, though Vonage is already taking steps to ensure it does not have to discontinue service. The Commission will continue to follow developments in these proceedings and any results on the competitive market will be detailed in next year's report.

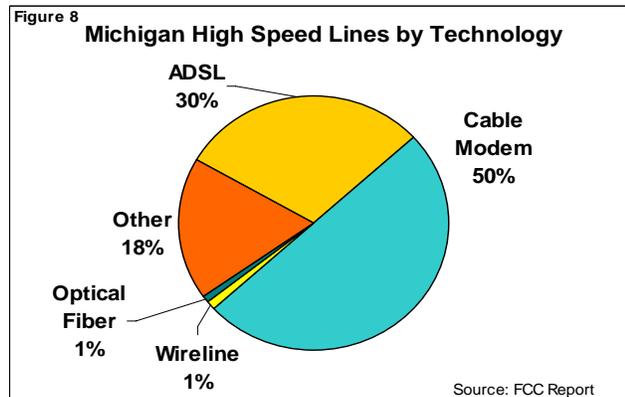
increase from last year in reported VoIP subscriptions. The Commission believes that this is indicative of overall growth in this market. While the number of VoIP customers currently represents only a small portion of telecommunication service subscribers in Michigan, it is an important area to monitor as there are many issues of interest to the Commission related to VoIP including federal universal service funding, 9-1-1 functionality and funding, and compensation for traffic exchange between providers. These and other VoIP issues are currently under the jurisdiction of the FCC and are being debated at the federal level. The results of the federal discussions may impact telecommunications competition in Michigan, therefore the Commission will continue to follow policy developments in this area.

Many of the newer technologies for telecommunication services, such as VoIP, are heavily reliant upon the internet and the ability of customers to access the internet with connections that allow for high rates of information transfer. The Commission has no jurisdiction in this area and therefore does not collect information about high speed internet lines in Michigan. However, the FCC prepares a semi-annual report titled *High Speed²³ Services for Internet Access* which contains information about this important segment of the communications industry. As of June 2006, the FCC estimates that 66% of Michigan residences located in an ILEC's local phone service area can receive digital subscriber line (xDSL)²⁴ service and that 92% of Michigan residences located in a cable provider's television service area can receive cable modem service. This compares to the nationwide percentages of 79% and 93%

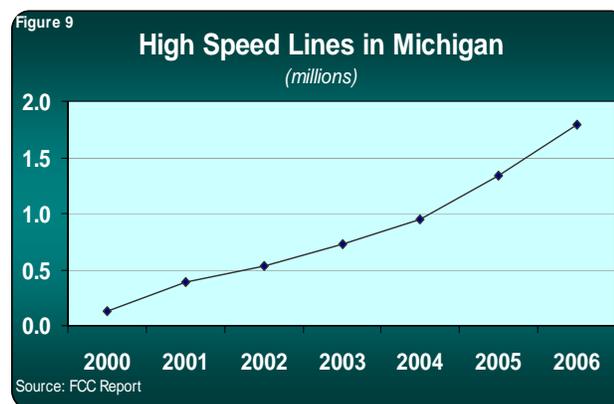
²³ This FCC report defines a "high speed" internet connection as a connection that provides the user with over 200 kilobits per second (kbps) in at least one direction. The term "broadband" in this section is used synonymously with "high speed."

²⁴ xDSL is a generic name for high speed digital lines provided by CLECs and ILECs to their local subscribers. These lines provide up to 8 million bits per second. Asymmetric, or ADSL, is the most common type of xDSL and provides more bandwidth downstream (from the central office to the customer site) than upstream. Symmetric, or SDSL, provides identical amounts of bandwidth upstream and downstream.

respectively.²⁵ In Michigan, the majority of the high speed lines are provided via these two modes of service. Emerging technologies, such as satellite and wireless, also represent a significant number of high speed internet connections in Michigan. Figure 8 shows the distribution of Michigan high speed lines by technology.²⁶



Michigan continues to see growth in the number of high speed lines as shown in Figure 9 below. In fact, 2005-2006 represented the largest increase in high speed lines since the Commission has been preparing this report.²⁷ Providers in Michigan were serving an additional 450,260 lines in June 2006 from June 2005, bringing the total number of high speed lines in Michigan to 1,786,572.



A major contributor to this growth is broadband connection via mobile wireless. In June 2006, the number of broadband subscriptions over mobile wireless was over 40 times greater than in the previous year. In fact, growth of mobile wireless broadband connections accounts for 66% of the total

²⁵ See FCC Report *High Speed Services for Internet Access: Status as of June 30, 2006*, Table 14.

²⁶ The categories (with the exception of “other”) represent the mutually exclusive categories chosen by the FCC for use in their report. The categories SDSL and Fixed Wireless are not shown since each represents less than 1% of the total broadband connections in Michigan. The “Other” category includes the FCC categories of mobile wireless, satellite and any other technologies presented in a combined format for confidentiality purposes.

²⁷ This is especially important since prior to the June 30, 2005 reporting date, the FCC did not require providers serving fewer than 250 high speed lines to report their data. When the FCC began requiring these providers to report data, there was a significant one time increase in the number of companies reporting data between Dec. 31, 2004 and June 30, 2005. This may have been a factor in the number of additional lines seen between June 2004 and June 2005.

growth we see in this area. Therefore, it is also important to look at the change in the number of broadband connections exclusive of mobile wireless. We are still seeing increases in these other types of broadband though the growth is far more moderate. The number of broadband connections for types other than mobile wireless increased 11% from June 2005 to June 2006. This continued growth offers a promising future for customers who wish to use communications services that rely upon high speed internet access.

Additionally, the FCC reports that there is at least one provider of high speed internet services serving at least one customer in every zip code in Michigan. However, while there is at least one provider in every zip code, this does not necessarily mean that high speed lines are available to all customers in each zip code, particularly those in rural areas. Satellite service is one option for many rural customers. However, weather and other conditions can affect the performance of internet provisioned in this manner. One alternative being developed is Broadband over Power Lines (BPL). The Commission is hopeful that this technology can help serve customers in rural or traditionally high cost areas since it makes use of the already existing power line grid. On the national level, an important development for this technology was the FCC's November 2006 decision to classify BPL in the same way it classifies DSL and cable modem service.²⁸ This decision by the FCC should remove the regulatory uncertainty that had existed for BPL providers and will hopefully spur growth in this area.

Michigan has a BPL deployment scheduled in our state. Last year's report discussed the commercial deployment of BPL in the Grand Ledge area. That project had relied on a hybrid wireless/BPL system for providing internet service. Over the course of the last year, major changes have occurred to this project. The initial company has sold the project to a new company, utility.net. Instead of relying on a hybrid network, utility.net is expected to be

²⁸ The FCC classifies these services as information services as opposed to telecommunications services. This designation makes these services essentially unregulated.

deploying a true BPL network: That is, the internet signal will be placed onto the grid at the substation (or elsewhere along a medium voltage line as necessary) and will travel along the power lines directly to the customer's own interior electrical wiring. Regenerating units placed strategically along certain power poles will boost the signal enabling it to travel considerable distances without losing quality. Customers will then have a modem that plugs directly into any outlet in their home to which they can easily connect their computers. Consumers Energy Company (CECo) is working with utility.net in a "landlord model" that allows CECo to work with utility.net at no risk and no cost to the electric utility while enabling CECo to maintain the integrity of the power grid. Utility.net has committed to serving portions of Grand Ledge and the Lansing area for its initial deployment. Utility.net and CECo then hope to expand the project to other areas of the state.

Other technologies to deliver broadband such as Wi-Fi and WiMAX are also in use or development in Michigan markets. Wi-Fi hot spots continue to increase in popularity and allow users to access the internet in places such as coffee shops, airports, and even gas stations. Many government entities are also offering Wi-Fi. For example, the State of Michigan offers hot spots in several areas including some state parks, welcome centers, and the Public Service Commission offices. WiMAX is a relatively new technology similar to Wi-Fi. WiMAX would offer downloads of up to 46 Mbps, uploads of up to 14 Mbps, wide area coverage, advanced security, and mobility which would enable VoIP. The Commission is aware of one company which announced in 2006 that it would offer this service by early 2007 in Muskegon County.²⁹ This would represent the first such deployment in Michigan. The State of Michigan is providing some financial backing for the project.

²⁹ See [Arialink press release of 4/7/06](#).

Much of the dynamic growth in the telecommunications market 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 in the state and will monitor the growth of new technologies in broadband deployment and any effects these industries may have on wireline telephone competition in Michigan.

Mergers and Acquisitions

One area that continues to have an impact on competition levels in Michigan involves industry mergers/acquisitions. In 2005, the transfer of control of AT&T Corp. and its subsidiaries to SBC Communications (subsequently named AT&T Inc.) was completed. The FCC approved the merger with conditions relating to high capacity transport services, special access pricing, unbundled network elements, as well as providing xDSL service on a stand-alone basis. In 2006, the FCC approved the merger of AT&T Inc. and BellSouth Corp. To encourage approval of the merger, AT&T made a series of voluntary commitments that are enforceable by the FCC. Significant among these, for Michigan, is the commitment to make broadband service available in some form in its entire Michigan footprint.

The merger of Verizon Communications, Inc. and MCI, Inc. was consummated on January 6, 2006. This transfer of control resulted in MCI becoming a wholly-owned subsidiary of Verizon and was renamed Verizon Business. The FCC approved this merger late in 2005 with qualifications regarding special access, stand-alone DSL and internet policy.

In addition to these mergers of larger providers affecting the climate in Michigan, there have been several mergers involving CLECs. Michigan is seeing results of mergers of CLECs on a national scale. More financially viable CLECs are purchasing struggling CLECs to add to their customer base and diversify their operations. The results of the AT&T, Verizon, and CLEC

mergers on the levels of competition are included in the 2006 survey results of the respective companies and reflected in this report.

Conclusion

Based on available data gathered by the Commission through its surveys over the last eight years, there was a history of continued growth in the percentage share of CLEC lines in Michigan from a 4% share in 1999 to a 27.5% share in 2004. However, in 2005 that percentage declined and in 2006 declined further to 18.3%. This represents a 17% decline in competitive lines for 2006. The continued decrease in 2006 indicates that competition in the basic local exchange industry in Michigan is still undergoing significant changes.

Competition for basic local exchange service in Michigan prior to 2005/2006 was based mainly on CLECs using local switching via AT&T Michigan's UNE-P to provision customers. UNE-P accounted for 66% of the competitive lines used to serve customers in 2004. In 2005 it decreased to 13% and it has, for the most part, disappeared in 2006. This method of serving customers was eliminated when the FCC and the courts overturned portions of the FCC's Triennial Review Order (TRO). The ILEC's obligation to provide UNE-P to the CLECs at a regulated, cost-based price was, thus, eliminated. This is significant because the high levels of wireline competition achieved in Michigan in 2003 and 2004 were predominantly reached through the use of UNE-P provisioning, which accounted for a majority of the competitive market during that time. Primarily as a result of the FCC and court actions, Michigan and most states are experiencing a significant change in the area of wireline competition.

The transition away from UNE-P was completed in 2006. The Commission assisted in the efforts to transition customers in a timely and efficient manner. Competitive providers have now transitioned customers from UNE-P to other methods, mostly by using UNE-L or LWC

service and wholesale advantage, which competitors can purchase from AT&T Michigan and Verizon respectively, at unregulated, market-based prices.

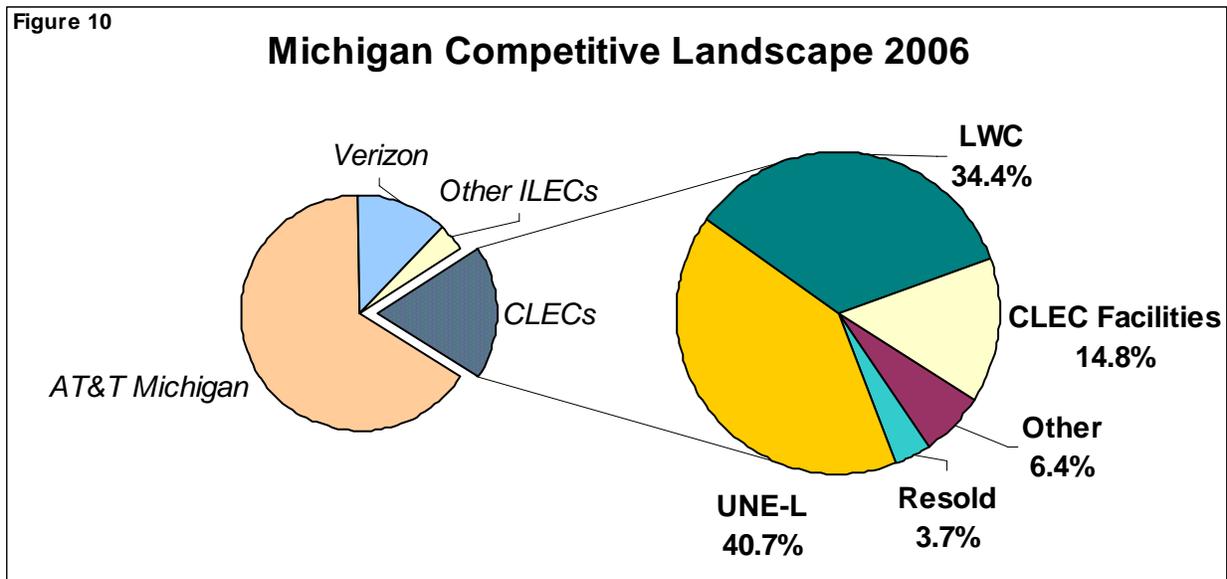


Figure 10 depicts the competitive landscape in Michigan for 2006.³⁰ This has changed dramatically from prior years when the components that made up the level of competition were different and based on other methods of serving customers.

Many factors have had an impact on Michigan’s declining levels of wireline competition. The elimination of UNE-P at regulated prices, the emergence of new technology options, the consumers’ continued interest in competitive low-cost wireless plans offered by a number of providers, and the recent mergers involving incumbents and competitors have all led to the continued decrease in competition in the wireline industry in Michigan. It should be noted that these factors are governed by outside forces, such as the FCC and courts or are affected by the introduction of new technologies into the market, and are not under the direct regulatory control of this Commission.

³⁰ The LWC complete category includes the residual UNE-P lines. The Other category includes DSL, VoIP, and other lines.

The Commission will continue to strive to meet its obligations under the MTA to ensure a just and reasonable primary basic local exchange service rate, enforce basic consumer protections, including prohibitions against slamming and cramming, and resolve disputes that arise under the MTA. At the same time, the Commission will monitor new technology developments and any impacts they may have on the competitive landscape in Michigan. The Commission will apprise the Governor and the Legislature of any future developments that may warrant action.