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June 2, 2008

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. This report, as well as reports from previous years, 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 markets in the state. As in previous years, this report includes information on the traditional wireline industry as well as services provided via diverse telecommunications technologies, such as wireless and Voice over Internet Protocol (VoIP).

In a trend that began in 2002, the total number of wirelines in Michigan has again decreased. For 2007 the total number of wirelines in Michigan decreased 6.8% from the previous year. In both 2005 and 2006, there was also a decrease in the percentage of lines served by competitive providers. However, for 2007 we see a reversal of this trend, with the competitive providers' market share increasing from 18.3% to 20.7%.

A significant regulatory event played a large role in the levels of competition in Michigan over the past few years. As mentioned in previous reports, 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. Competitive providers' transition away from regulated UNE-P was completed in 2006. This transition to alternate means of serving customers was likely a large factor in the decrease in competitive market share seen in 2005 and 2006.

The data for 2007 indicate that the competitive market is rebounding in Michigan, largely due to the investment in infrastructure of the competitive providers. While competitive providers can offer service to customers through a variety of methods that use the incumbent providers' networks, in 2007 we see a large increase, from 14.8% to 25.1%, in the percentage of competitive lines served via the competitive providers' own facilities. While the competitive market share is still below the 2004 high of 27.5%, the additional network investment by competitive providers is a very positive sign, as it indicates a higher probability of more stable competition in the future.

Additional data available to the Commission allows for the monitoring of other non-wireline telecommunications market developments. These areas continue to experience rapid growth. The number of wireless subscriptions in Michigan continues to increase; the FCC reports that there over 7.3 million wireless subscriptions in Michigan as of June 30, 2007. High speed internet connections have also increased substantially; over 1 million additional lines were reported to the FCC for the 12 month period between June 30, 2006 and June 30, 2007 bringing Michigan's total high speed lines to just under 3 million as of June 30, 2007. The availability of high speed access to the internet affects emerging telecommunications services such as VoIP. VoIP service in Michigan is being offered by many different companies—from cable television providers to traditional telecommunications companies. The number of reported VoIP connections in Michigan has also increased over the previous year.

The *Status of Telecommunications Competition in Michigan* report for 2007 finds that while the total number of wirelines continues to decrease, competitive providers are beginning to regain market share that was lost in 2005 and 2006. Additionally, competitive providers are serving more lines via their own facilities. This requires the competitive provider to make additional significant investment, which is an indication that the provider has the intent of remaining in the marketplace in the long term. 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 is committed to monitoring 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,

Orjiakor N. Isiogu, Chairman

Monica Martinez, Commissioner

Steven A. Transeth, Commissioner

The Status

of

Telecommunications

Competition

in

Michigan

June 2008

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 eighth report filed by the Commission includes information on the traditional wireline industry as well as other telecommunication technologies.

A significant regulatory event played a large 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 2007 finds that competitive providers have begun to recover a small portion of the lines which were lost due, in part,

[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 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.

to the elimination of UNE-P as an economical method of provisioning customers, the emergence of new technology options, and mergers involving incumbents and competitors, by investing in network infrastructure amidst the economic uncertainty in Michigan.

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 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 websites.

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

While the reselling of toll services is unregulated, the Commission has a registration process pursuant to MCL 484.2211a. Under this program, 272 carriers registered as resellers of toll service in Michigan for 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 link for rate comparisons among providers. Additional information is available in the report of 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 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 1,200 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, at one combined price. In some cases, these bundled services

[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.

include wireless, internet access services and video commonly known in the marketplace as quadruple play.

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 out to the 41 ILECs and 202 CLECs in the state of Michigan that were licensed as of December 31, 2007. The data collected through this survey is for the year ended December 31, 2007. The information was gathered to assist the Commission staff in evaluating the scope of local competition in Michigan.

The survey for 2007 was updated to accommodate information more relevant to the current status of telecommunications competition in Michigan. Some of the information requested in the survey is considered confidential by the companies. Hence, the results of most portions of this survey are reported as total CLEC numbers to maintain the confidentiality of the individual company numbers. For 2007, all of the ILECs responded to the ILEC survey and 146 of the 202 CLECs and ILECs that have CLEC operations filed a response to the CLEC survey. From the group of CLECs, 94 reported that they are actually providing local service.

From the data compiled for 2007, staff found that the number of lines provided by CLECs via their own facilities, through unbundled network element loops (UNE-L)[6], Local Wholesale arrangements (LW), and through resale of incumbent providers' services was 1,013,897. The survey findings indicate that the total number of lines from all ILECs including AT&T Michigan and Verizon, and CLECs, provided in Michigan was 4,904,384. CLEC lines accounted for 20.7% of the total lines in 2007. AT&T Michigan's share was 63.5% (3,115,545 lines)[7] while Verizon's share was 11.8% (579,248 lines). The small independent telephone companies represented the remaining 4.0% (195,694 lines) of the total lines in Michigan (*see* Figure 1).

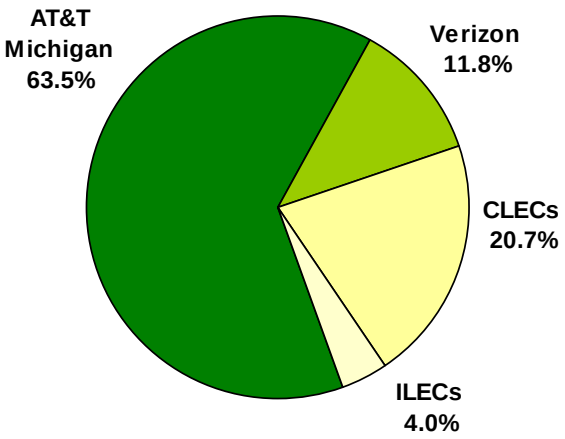

Figure 1: Michigan Market Share in 2007

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 and Verizon submitted, 57.1% of the competitive lines are provided in the Detroit area, 26.9% of the competitive lines are provided in the Grand Rapids area, 6.7% of the lines are provided in the Lansing area, 7.3% of the lines are provided in the Saginaw area, and 2.0% 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

[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.

[7] 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.

served by AT&T Michigan, although there is some growth of competition in the Verizon areas. The competitive lines reported by the CLECs in the Verizon territory nearly doubled during 2007.

The Commission continues to license new CLECs, and as of the end of 2007, the CLECs were providing service to 20.7% of the wirelines provided to customers in Michigan. This is a slight increase from last year and an end to the decreases that were noted in 2005 and 2006. On March 19, 2008, the FCC released its latest report to date on *Local Telephone Competition: Status as of June 30, 2007*. For the Michigan companies that are required to report this data to the FCC, the ILECs reported 4,118,050 lines, and the CLECs reported 923,265 lines for a total of 5,041,315 lines. From the most recent data available from the FCC, the CLEC share was reported at 18% as of June 30, 2007. The number of ILECs reporting to the FCC was 26 whereas the number of CLECs was 47 for a total of 77 providers. Again this year, there was an increase in the number of reporting companies as providers comply 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 2007. The data indicates that of the 146 CLECs reporting, 52 (approximately 36%) were serving no Michigan customers in 2007. A second group of 46 CLECs (slightly over 31%) served between 1 line and 1,000 lines. A third group served between 1,001 and 10,000 lines each and is comprised of 33

CLECs With No Lines	52	36%
CLECs With 1 – 1,000 Lines	46	31%
CLECs With 1,001 – 10,000 Lines	33	23%
CLECs With over 10,000 Lines	15	10%
Total CLECs Responding to Survey	146	100%

Figure 2: The 2007 Michigan Survey Results

CLECs for a 23% share, and the last group of CLECs served over 10,000 lines each and represents 15 CLECs for a 10% share.

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

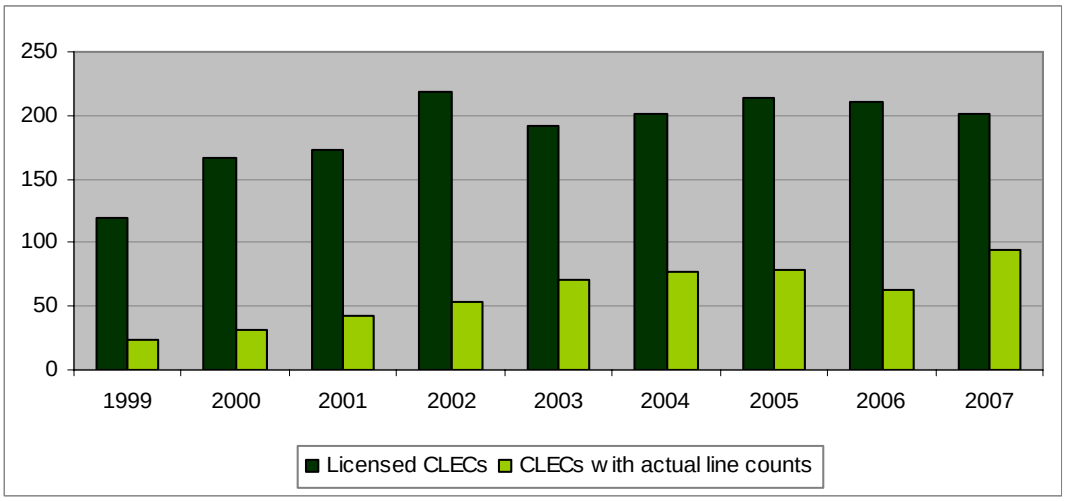

Figure 3: CLECs with lines in relation to licensed CLECs, as of 12/31/2007

other than local, such as resold long distance. The number of CLECs with actual line activity in relation to the number of licensed CLECs rose in 2007, as represented in Figure 3. The Commission has a process in place to review any license that is not actively being used over a reasonable period. A license may be revoked, if not used. In fact, a total of 27 CLEC licenses were revoked in 2007 and nine licenses were voluntarily surrendered. However, 19 new CLEC licenses were approved for the same time period.

A portion of the data gathered by the Commission for the last nine years is presented in table format in Figure 4.

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

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 4% share to a peak of 27.5% 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. The increase in reported CLEC lines can be partially attributed to a higher data request response rate. A key observation can be made: CLEC lines provisioned via CLECs' own facilities have consistently grown since 2005, while CLEC lines provisioned via ILEC facilities have gradually decreased. This data suggests that the competitive network infrastructure is, in fact, steadily shifting towards facilities based competition versus competition which relies solely on the

incumbents' networks. This is especially evident in the residential lines, where over two thirds of the lines provided via the CLEC facilities are residential customers. As the CLECs invest in network infrastructure, Michigan should benefit from an even more stable competitive telecommunications market in the future.

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, which peaked in 2007 with the largest increase in competitive lines provided over CLEC owned facilities. 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.

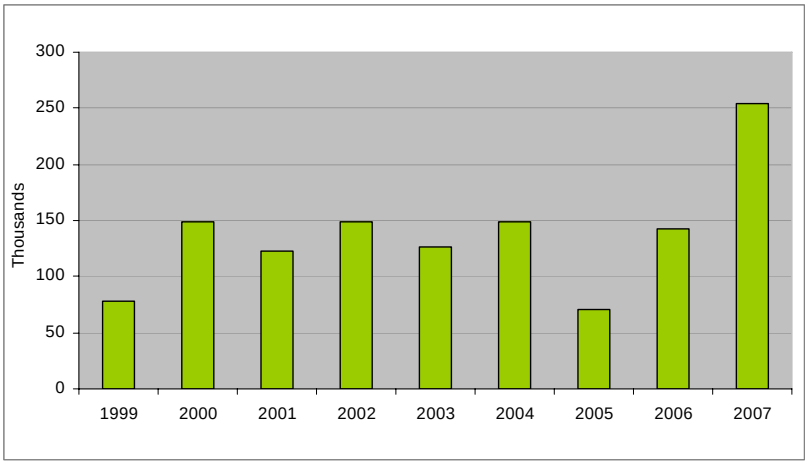

Figure 5: Competitive lines provisioned via CLECs' facilities.

The graphical representation in Figure 6 depicts the evolution of the market share over the last nine 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. The Commission is

encouraged that, perhaps, the telecommunications marketplace may be stabilizing 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 remained fairly constant over the nine year period.

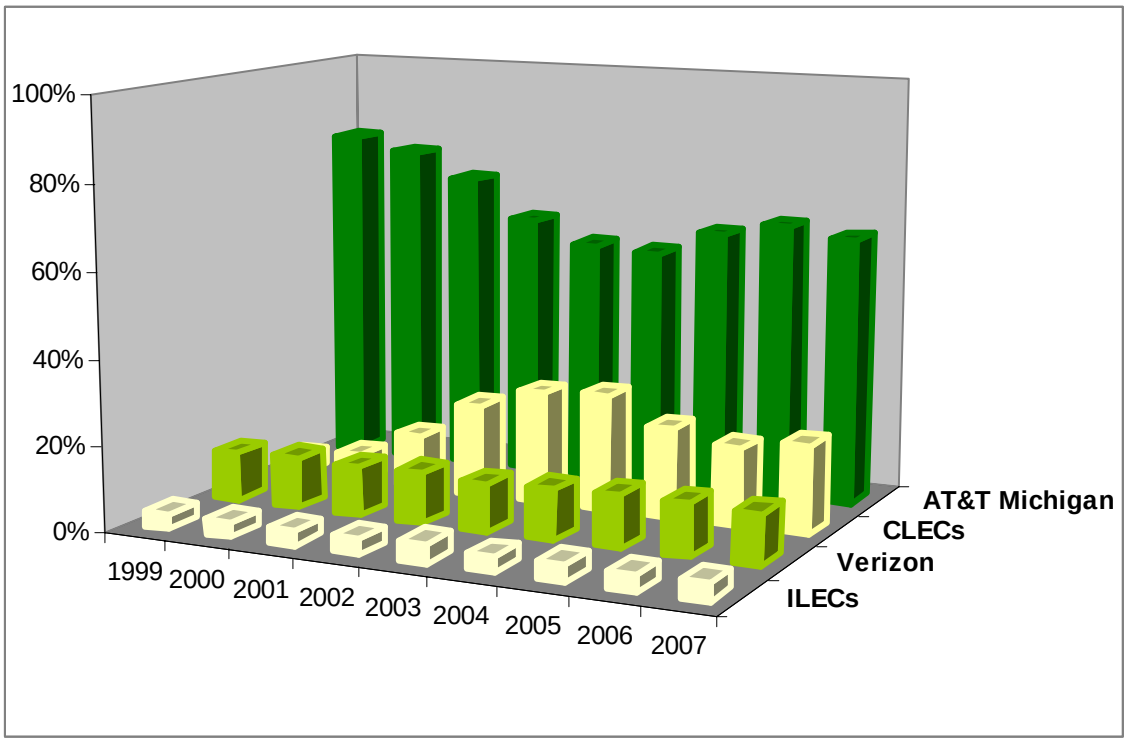

Figure 6: Michigan Market Share Evolution

Again this year, the total number of customer wirelines decreased; a trend that began in 2002. Historically, providers have asserted that the decline in total wirelines was due to the increase in mobile wireless[8] users and the use of other types of telephony

[8] The data collected by the FCC in the *Numbering Resource Utilization in the United States* report released in June 30, 2007 reflects some number porting from the wireline carriers to the wireless carriers which appears higher than the number porting from the wireless carriers to the wireline carriers.

including voice over internet protocol[9] (VoIP); as well as a movement away from using dial-up internet to high speed connections. While there is merit in this argument, the Commission would note that many telecommunications companies are offering one or more of those additional services provided through their own company or an affiliate. Hence, at this time, the Commission would assert that the decline in the total number of customer wirelines does not affect the competitiveness of telecommunication providers in the marketplace in Michigan.

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 the FCC.[10] The FCC prepares a semiannual report which includes data from mobile wireless companies that offer service in Michigan.

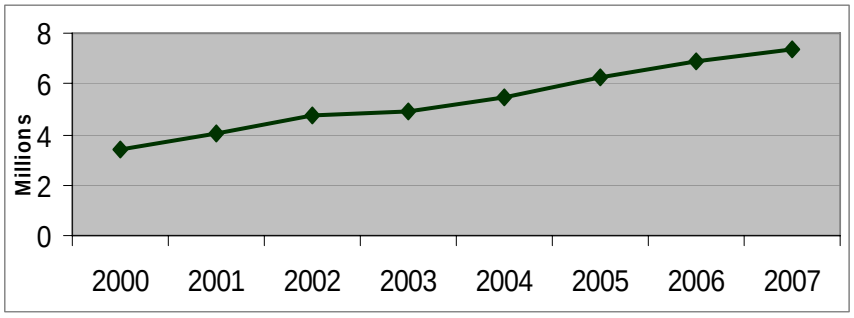

Figure 7: Mobile wireless subscription in Michigan. FCC Data.

The data from the FCC's most recent report, *Local Telephone Competition: Status as of June 30, 2007,*

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

[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.

shows that the number of mobile wireless subscriptions in Michigan continues to increase (*see* Figure 7). The FCC reports that Michigan had 12 wireless providers serving 7,333,242 wireless subscriptions as of June 30, 2007. This represents an increase of just over 400,000 lines from the year prior (*see* Figure 8). While the growth rate for the 2006-2007 years is less than seen in recent years, the growth of mobile wireless is a strong force in the telecommunications market today.

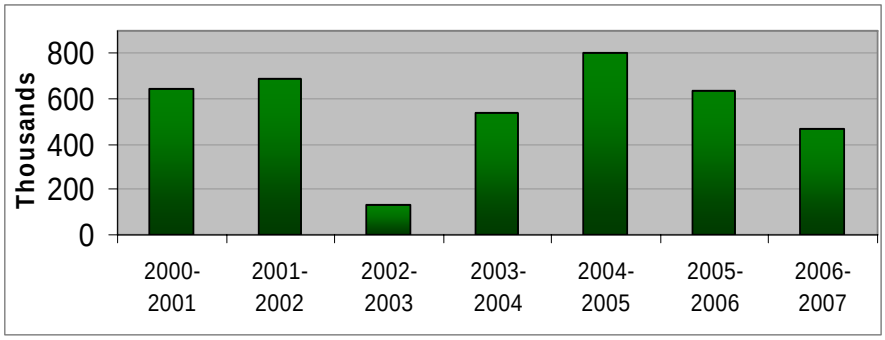

Figure 8: Annual change in mobile wireless subscription in Michigan. FCC Data.

As noted previously, the Commission does not believe mobile wireless is a functional equivalent to wireline service for all customers. However, there is a portion of the population that chooses to use mobile wireless service as a substitution for, rather than in addition to, wireline service. The Centers for Disease Control and Prevention (CDC), in its *Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, July-December 2007*, released May 13, 2008, estimates that, in the second half of the year 2007, 15.8% of American homes did not have a wireline phone, but did have at least one wireless phone. The CDC's analysis for the same time period

estimates that in the Midwest 15% of adults were living in homes with only wireless phones.[11] Despite some customers' choice to switch solely to wireless telecommunications, 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 Michigan customers, can wireless be a truly competitive substitute for wireline phone service.

On February 4, 2008, the FCC released its *Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Radio Systems—Twelfth Report* (CMRS Report). This report compiles data through the end of the 2006 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 whose borders are defined by the Department of Commerce. Due to the large geographic area that is encompassed by Economic Areas, the FCC's data only allows for making generalizations about wireless service in Michigan.[12]

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 96% when calculated based on US

[11] This percentage is higher in the Midwest than in some other areas of the country. The CDC estimates that only 10% of adults in the Northeast rely solely on wireless service.

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

Census 2006 estimated population data, much greater than the nationwide mobile penetration rate of 80%. The penetration rates for 2006 reported by the FCC for each of the Economic Areas containing Michigan counties are as follows:

EA 57 96%

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 56%

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

EA 59 72%

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

EA 61 66%

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

EA 62 68%

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

EA 65 67%

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

When the high penetration rate of Area 57 is compared to the 56% penetration rate of Area 58 (made up of northeastern Lower Peninsula and eastern Upper Peninsula counties), one can acutely see how an urban versus rural setting impacts wireless service subscriptions within Michigan. However, while the penetration rates are not directly comparable to the rates reported by the FCC for 2005,[13] there is evidence of continued growth in the number of wireless subscriptions in both urban and rural areas. As shown

[13] This is due to the FCC's use of U.S. Census 2000 actual population data to calculate 2005 penetration rates, whereas for 2006 penetration rates the U.S. Census 2006 estimated population data was used.

in Figure 9, each EA, which includes Michigan counties, shows an increase in the wireless penetration rate.

Economic Area	2005 **(based on US Census 2000 population data)**	2006 **(based on US Census 2006 population estimates)**
57	85%	96%
58	41%	56%
59	63%	72%
61	58%	66%
62	63%	68%
65	59%	67%

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

It is important to note that the FCC data showing increases in the wireless penetration rates is not a measure of whether coverage exists in all areas. Therefore, additional measures of wireless coverage, such as wireless provider coverage maps, must be analyzed to provide a more robust picture of whether wireless is a viable option for Michigan customers. Provider coverage maps 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. [14] 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] Broader region maps are also available to provide a more general idea of where coverage exists. From the Commission's review of these maps, it appears that many areas of the Lower Peninsula have decent wireless coverage. While

[14] Coverage maps can be found on the wireless providers' websites. For examples of the provider coverage maps, see the maps provided by SprintNextel or Verizon Wireless. Other providers offer similar maps on their websites.

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

there are some providers offering wireless coverage in the Upper Peninsula, these customers have fewer choices among providers.

The FCC CMRS Report also contains additional information regarding the level of mobile wireless coverage, such as maps showing the rollout of next generation technology[16] by census block. Next generation mobile wireless technologies provide for higher speeds of information transfer and allow advanced video and internet content to be accessed. The majority of the Lower Peninsula continues to be covered by some form of next generation technology. The metropolitan Detroit, Lansing, and Grand Rapids areas are covered by even more advanced technologies. There continues to be more limited rollout of next generation technologies in the Upper 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 movement toward making it easier for customers to use their choice of phone, including the ability to transfer the same phone between different mobile wireless providers.[17] While it is difficult to determine how many customers have "cut the cord,"[18] it is very

[16] The FCC defines a next generation technology as those technologies more advanced than second generation (2G); this includes those technologies that are sometimes referred to as interim technologies (or 2.5G) as well as third generation (3G) technologies.

[17] There are two main types of technologies used to provide mobile wireless coverage in this country, and most mobile phones are 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 customers' ability to transfer mobile phones among different providers' networks.

[18] 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.

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 wireless service, the Commission will continue to monitor to the best of its ability the effects of the wireless market on wireline competition in this state.

Emerging 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[19] (BPL) as well as fixed and mobile wireless broadband. The MTA as amended in November 2005 includes a registration requirement for providers of new or emerging technologies. The Commission has an online registration system, the Interstate Telecommunications Service Provider Registry, to help these providers meet this requirement.

VoIP is one emerging technology that is beginning 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. The Commission Staff has separately surveyed those providers that are registered with the Commission as VoIP providers to determine the types of service available and number of Michigan VoIP customers. The results of this survey indicate there are a significant number of VoIP lines being served by registered VoIP providers, the vast majority of which are residential. VoIP providers report offering a mix of residential and business services including local and long distance calling, as well as

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

features such as international calling, voice mail and call forwarding, among others. All of the responding providers who are registered as VoIP providers offer some form of 911 service.

Since some registered VoIP providers did not respond to the voluntary survey, and as the Commission is aware of other VoIP providers, such as those offering non-interconnected VoIP (e.g. Vonage or Skype), that are not currently registered in our database, more accurate data regarding customer subscription numbers is not available for analysis. However, the data available to the Commission does show a pronounced increase from last year in reported VoIP subscriptions, indicating continued growth in this market. While the number of VoIP customers currently represents a relatively small portion of telecommunication service subscribers in Michigan, it is an important area to monitor. 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 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.

The ability of a customer to choose VoIP may be, in some instances, dependant upon the customer's ability to access a high speed internet connection, commonly known as broadband. The Commission does not collect information on the number of broadband connections due to lack of jurisdiction in this area, however it does monitor developments concerning broadband in Michigan. One important information source regarding broadband is a semiannual report compiled by the FCC. The most recent of these reports,

High Speed Services for Internet Access: Status as of June 30, 2007 compiles broadband data submitted on the FCC's Form 477 through mid-year 2007. According to this report, Michigan ranks tenth in the country in number of high speed lines, with just under 3 million lines (2,966,289). This is an increase of over 1 million lines from June 30, 2006, the largest annual increase in high speed lines Michigan has experienced (*see* Figure 10).

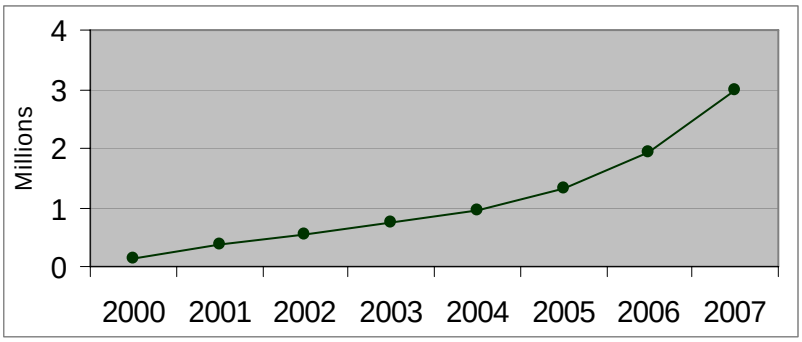

Figure 10: High speed lines in Michigan. Mid-year FCC Data.

This represents a continuation of the trend of rapid growth in the number of high speed connections in Michigan. Residential customers represent two thirds of the nearly 3 million high speed lines in Michigan, while business connections totaled one third of all broadband lines in Michigan.

The FCC's report also shows that there are 74 different providers of high speed lines in Michigan using one or more of the following technologies: digital subscriber line (DSL), traditional wireline technologies,[20] cable modem, fiber optic line, satellite, fixed wireless, and mobile wireless. In Michigan, the majority of the non-mobile wireless high speed lines are provisioned using either DSL or cable connections. As of June 30, 2007, the FCC estimates that 72% (up 6% from the previous year) of Michigan residences located in an ILEC's local phone service area can receive digital subscriber line (DSL) service and that 94% (up 2% from the previous year) 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% and 96% respectively.[21] The distribution of lines by type of technology is shown in Figure11.[22]

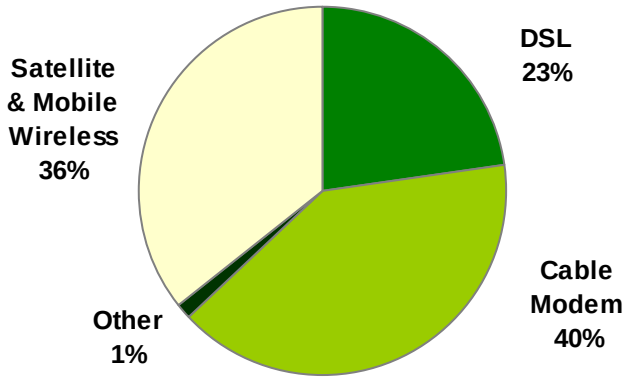

Figure 11: High speed lines in Michigan. Mid year FCC Data.

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

[20] Traditional wireline technologies used to provide equivalent Internet access functionality include T-carrier systems and Ethernet service over copper versus fiber-plant.

[21] *See* FCC Report *High Speed Services for Internet Access: Status as of June 30, 2007* Table 14.

[22] The "Other" category in the chart includes Fixed Wireless, Traditional Wireline, and Optical Fiber.

high speed lines are available to all customers in each zip code, particularly those in rural areas. The FCC's report is based on data collected on the FCC's Form 477, which has historically collected broadband data based on zip codes where providers offer service. According to the High Speed Lines Report, a zip code is considered to be 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 this NPRM, the FCC asked for comment regarding areas in which Form 477 could be improved 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. On the same date, the FCC issued a Further Notice of Proposed Rulemaking, seeking comment on broadband service pricing and availability. The Commission is following developments in this and other FCC dockets relating to the deployment of high speed internet service.

Aside from FCC data, additional sources also show that internet access is becoming more readily available to Michigan customers. Information from the U.S. Census Bureau's *Internet Use Supplement to the October 2007 Current Population Survey*, presented in the National Telecommunications and Information Administration's (NTIA) report *Networked Nation: Broadband in America 2007* shows that approximately 70% of Michigan's population uses the Internet, with about 59% of the population having home internet access. The percentage of population with home internet access is similar between urban and rural areas, with slightly more rural areas having home access (61%) than urban areas (57%). However, the speed of connection used to access the Internet varies greatly between urban and rural areas, as shown in Figure 12, with dial up connections still being used to access the internet in rural locations.

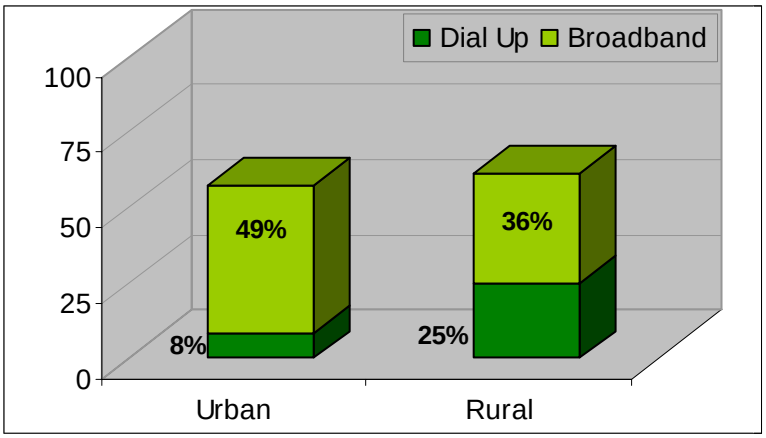

Figure 12: Home internet access in Michigan. U.S. Census Bureau data.

There are some broadband options available for rural customers. Satellite broadband is one such technology that is available in many rural areas. However, weather and other conditions can affect the performance of internet provisioned in this manner and the initial costs are higher than with other types of broadband service. While broadband may be available to some rural customers, these customers typically do not have the choices among providers that urban customers enjoy. This may result in higher

priced offerings, or slower service speeds—making rural customers less likely to upgrade their internet connection to a broadband connection.

As noted in last year's report, one alternative being developed is Broadband over Power Lines (BPL). While the FCC has removed many regulatory barriers for BPL with its decision to classify the technology similarly to DSL and cable modem service,[23] many technical issues regarding BPL remain, such as concerns over interference with other devices.

In the 2006 and 2007 *Status of Telecommunications Competition in Michigan* reports,[24] the Commission referenced the development of a BPL deployment in Grand Ledge, Michigan. The project is being developed by utility.net, working with Consumers Energy Company (CECo) in a "landlord model" that allows CECo to work with utility.net at no risk and no cost to the utility while enabling CECo to maintain the integrity of the power grid. Commission Staff has learned through communication with utility.net, that while some build-out of the project has occurred, the project is currently delayed. The Commission will continue to provide updates on the status of this project in future reports.

Other technologies that deliver broadband within the wireless domain – fixed and mobile – are also available in Michigan markets. As reported last year, Wi-Fi[25] hot spots continue to increase in popularity in the private and public sectors. Additionally, as

[23] As noted in last year's report, the FCC, in November of 2006, classified BPL as an information service as opposed to a telecommunications service, essentially making BPL an unregulated service.

[24] All previous Status of Telecommunications Competition in Michigan reports are available on the Commission's website.

[25] 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.

the spectrum allocated for the analog television signals is auctioned off by the FCC and wireless carriers acquire such spectrum and upgrade their networks, an increase in the speeds and availability of mobile wireless broadband will be evident in the future.

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

Again this year, industry mergers from past years and present continue to influence the telecommunications industry in Michigan. As the mergers of larger providers which transpired over the last two years mature, some competitive providers have also opted for restructuring their business corporations and acquiring other competitive carriers; such is the case with Telnet Worldwide, Inc. and Superior Technologies, Inc., Broadwing Communications, LLC and Level 3 Communications, LLC, OnFiber Carrier Services, Inc. and Qwest Communications Corporation, New Access Communications, LLC and First Communications, LLC, and lastly Trinsic Communications, Inc. and Matrix Telecom, Inc. These CLECs completed their business transactions during 2007.

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 digital subscriber lines

(xDSL)[26] 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. Significant among these, for Michigan, was the commitment to make broadband service available in some form in all of its Michigan footprints. Moreover, in 2006, the merger of Verizon Communications, Inc. and MCI, Inc. was consummated. 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.

Conclusion

In 2007, Michigan's competitive market share increased to 20.7%; rebounding from losses experienced in 2005 and 2006 and recapturing 5.5% of CLEC lines. The increase in reported competitive lines is a positive sign and can be partially attributed to a higher data request response rate this year. One key observation can be made: CLEC lines provisioned via CLEC's own facilities have consistently grown since 2005 and are at the highest levels since this Commission commenced its data reporting.

As noted earlier, a significant regulatory event played a large role in Michigan's competitive landscape 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 to provision customers. UNE-P accounted for two thirds of the competitive lines used to serve customers in 2004. This method of serving customers was eliminated when the FCC and the courts overturned portions of the FCC's Triennial

[26] 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.

Review Order (TRO). The ILEC's obligation to provide UNE-P to the CLECs at a regulated, cost-based price was, thus, eliminated. The Commission assisted in the negotiations to transition customers in a timely and efficient manner. Competitive providers transitioned customers from UNE-P to other methods, mostly by using UNE-L or LW, which competitors purchase from AT&T Michigan and Verizon, at unregulated, market-based prices. In 2007, Michigan experienced increased investment in facilities based infrastructure by the CLECs. This is a positive sign and an indication that the competitive landscape in the future years may be even more stable.

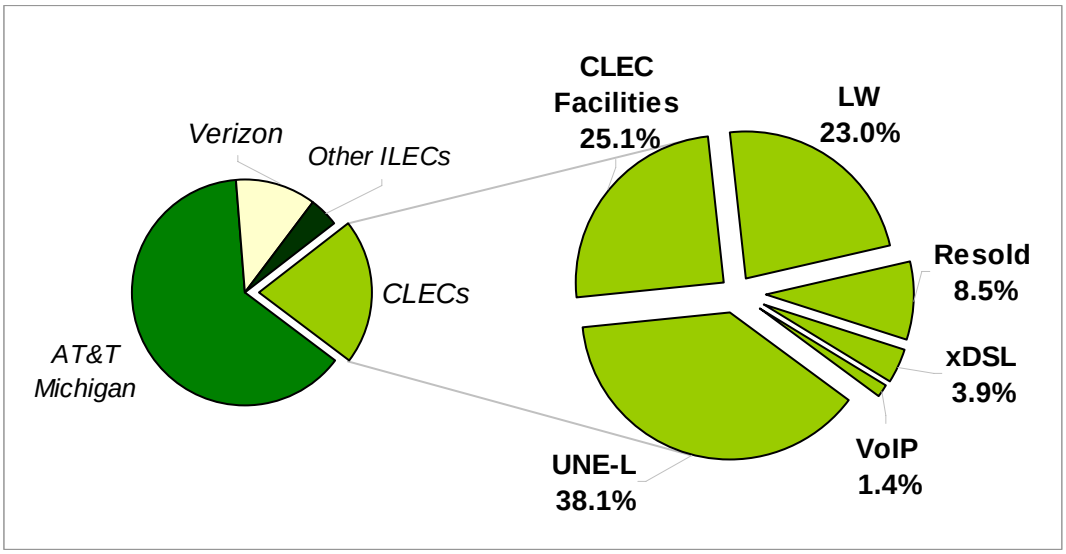

Figure 13: Michigan competitive landscape in 2007.

The chart in Figure 13 depicts the competitive landscape in Michigan for 2007. When compared to 2006 results, resale increased slightly while local wholesale arrangements (LW) and UNE-L decreased. The percentage of lines served over CLEC own facilities increased from 14.8% to 25.1%. As competitive carriers invest in developing their own networks, they are in a better position to offer other services on a

wholesale basis to other CLECs. As a result, consumers benefit from an increase in telecommunication service choices available to them.

The Commission continues to strive to meet its obligations under the MTA and monitor current developments in the telecommunications arena to ensure the citizens of Michigan have telecommunication service choices available to them. In March of 2008, the sunset provision was eliminated from the MTA. This is an indication that the Governor, Legislature, providers and others are satisfied with the MTA provisions and Commission policies that are currently in place related to the development and oversight of Michigan's competitive market. Should any issue arise that may warrant action, the Commission will apprise the Governor and the Legislature.