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DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS
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June 7, 2011

Honorable Rick Snyder
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Honorable Members of the Senate Energy and Technology Committee
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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 (Commission) in accordance with Section 103 of the Michigan Telecommunications Act (MTA). This report, as well as reports from previous years, is available on the Commission website at www.michigan.gov/mpsc. The report describes the status of competition in telecommunications services in Michigan, including, but not limited to, the toll and local exchange markets in the state. The report includes information on the traditional wireline industry in Michigan, as well as information specific to Michigan on mobile wireless, Voice over Internet Protocol (VoIP), and broadband.

For 2010, Michigan experienced a continued downward trend in the total number of wirelines that began in 2002, with 280,000 fewer lines in 2010 than in 2009. However, competitive providers' market share of the Michigan wireline industry for 2010 was 28.5 percent, the highest since the Commission has been preparing this report, and a quite significant increase from recent years. While competitive providers can offer service to customers through a variety of methods that use the incumbent providers' networks, a stable portion of CLEC wirelines, 32.3 percent for 2010, are provisioned over the competitive providers' own facilities. This suggests that the competitive network infrastructure continues to include facilities-based competition as opposed to competition reliant solely on the incumbents' networks. As was the case in 2008 and 2009, this trend of facilities-based competition is more evident in residential lines.

While the Commission does not have jurisdiction over most communications services that are not traditional wireline telecommunications, additional public data allows for the monitoring of developments in these markets. FCC data shows that the number of wireless subscriptions in Michigan grew 6.4 percent from June 30, 2009 to June 30, 2010 to approximately 8,690,000 wireless subscriptions. Data on wireless substitution from the Centers for Disease Control's National Center for Health Statistics estimates that between July 2009 and June 2010, 29.2 percent of adults in Michigan and 35.6 percent of children in Michigan were living in a wireless-only household, numbers above the national average. While the growth of mobile wireless is significant, it is important to note that the National Center for Health Statistics also estimates that 29 percent of Michigan households still relied mostly or completely on landline service for the same period. In addition to mobile wireless voice service, the Commission has always believed that VoIP subscriptions were an increasingly large portion of the telecommunications market in Michigan. The FCC recently mandated reporting requirements for interconnected VoIP

providers and the most recently released data shows that as of June 30, 2010, Michigan had 75 providers of interconnected VoIP serving just over 1.4 million interconnected VoIP lines.

Broadband internet service provides customers not only with the opportunity to use VoIP service, but with numerous additional benefits as well. While the Commission does not have authority over broadband, it does seek ways to support the availability and adoption of this important technology. One way the Commission is encouraging this development is in partnership with non-profit Connected Nation on the Connect Michigan project. The Connect Michigan project has made available an interactive broadband availability map, launched May 20, 2010, as well as research results on broadband adoption and barriers to adoption specific to both Michigan residences and businesses. These are all available at www.connectmi.org. Michigan continues to see growth in the number of high speed Internet connections, with 4,185,000 such connections reported to the FCC as of June 30, 2010. A large portion of the continuing growth in broadband connections is in mobile wireless broadband connections, which nearly doubled from mid-year 2009 to mid-year 2010. Michigan continues to rank 12th in the country for the number of high speed Internet connections according to the FCC data.

The *Status of Telecommunications Competition in Michigan* report for 2010 shows that, while the total number of wirelines continues to decrease, competitive providers' market share has increased substantially, especially if all VoIP lines reported to the FCC are included. Competitive providers continue to serve about a third of their lines via their own facilities. This represents continued investment in Michigan's competitive telecommunications infrastructure and serves as an indication that the provider has the intent of remaining in the marketplace in the long term. Additionally, alternative services—mobile wireless and VoIP—continue to see strong growth, leading to an incredibly diverse communications marketplace. The Commission will continue to strive to meet its obligations under the MTA to ensure that all Michigan citizens have access to telecommunications services and to resolve disputes that arise under the MTA. At the same time, the Commission is committed to monitoring developments in the wireless and broadband realms and any resulting 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.

Very truly yours,

Orjiakor N. Isiogu, Chairman

Monica Martinez, Commissioner

Greg R. White, Commissioner

The Status

of

Telecommunications

Competition

in

Michigan

June 2011

Submitted by the Michigan Public Service Commission
Michigan Department of Licensing and Regulatory Affairs
In Compliance with Public Act 179 of 1991 as Amended

MICHIGAN PUBLIC SERVICE COMMISSION

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Introduction

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

The telecommunications industry in Michigan continues to experience the same technological changes as the rest of the nation. The *Status of Telecommunications Competition in Michigan* report for 2010 finds that incumbent providers have continued to experience a decrease in their traditional wireline customer lines, a trend that began in the year 2002, while competitive providers have experienced a slight increase in their overall lines. Competitive providers appear to be relying less on the incumbents' network and more on provisioning their lines over their own networks. At the same time, alternative technologies, such as wireless and voice over Internet protocol, continue to add subscribers. In the broadband market, the effects of the funding awards by the American Recovery and Reinvestment Act of 2009 are not yet evident, as these providers are in the initial stages of deploying their networks.

Toll Markets

Long distance service is technically referred to as toll service and the providers of such services are referred to as interexchange carriers (IXCs). IXCs that own their own facilities are required to provide very little information to the Commission related to their operations. The

Commission does not license IXCs. They are required only to file tariffs with the Commission that are consistent with the provisions of the MTA. IXCs providing toll service via resale[1] 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, 281 carriers registered as resellers of toll service in Michigan for 2010. Although this is a self-registration process and is not subject to verification, it does indicate that there are numerous providers of this service. Additional information is available in the latest report the FCC issued in September 2010, *Trends in Telephone Service*. The FCC report indicates that between 1999 and the end of 2003, the FCC has approved all the section 271 applications by the Bell Operating Companies (BOCs) to provide in-region interLATA[2] service throughout the United States.[3] In Michigan, this process

[1] Resale is buying long distance phone lines in quantity at wholesale rates and then selling them to the end user for a profit.
[2] 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.
[3] 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.

was completed in September 2003. The FCC reports that more than 1,400 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.

Again this year, the effects of competition in the toll markets is evidenced by the number of optional toll package alternatives available, the number of providers who offer them and the declining prices for higher usage customers who do not utilize basic toll rates. Bundling of services and new pricing plans, as well as voice over Internet protocol[4] (VoIP) have blurred the distinction between toll and local services. Many providers are offering unlimited local and long distance services, plus unregulated features, at one combined price. In some cases, these bundled services include wireless, Internet access services and video, commonly known in the marketplace as quadruple play.

Basic Local Exchange Market - Wireline

The Commission conducts annual surveys of AT&T Michigan, Frontier,[5] the smaller incumbent local exchange carriers (ILECs), as well as all licensed competitive local exchange carriers (CLECs) in order to obtain an accurate depiction of the competitive marketplace in Michigan for basic local exchange service. This survey includes ILECs that also operate as CLECs in Michigan as those lines provided in another ILEC's territory are considered competitive lines. CLECs are providers that compete in the same geographic area as ILECs. This year's survey was sent to the 40 ILECs and 190 CLECs in the state of Michigan that were licensed as of December 31, 2010. The data collected through this survey is for the year ended

[4] VoIP is the technology used to transmit voice conversations over a data network using the Internet protocol. VoIP is discussed further in the Emerging Technologies section of this report.
[5] Frontier is formerly known as Verizon North Inc. and Contel of the South, Inc., d/b/a Verizon North Systems.

December 31, 2010. The information gathered assists the Commission in evaluating the scope of local competition in Michigan.

The results of this survey are presented as aggregate CLEC numbers to maintain the confidentiality of the individual company numbers. The surveyed companies consider some of the information requested to be confidential. For 2010, all of the ILECs responded to the ILEC survey and 132 of the 190 CLECs and ILECs that have CLEC operations filed a response to the CLEC survey. From this group of CLECs, 92 reported that they are actually providing local service.

As a historical perspective, 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[6] (UNE-P) to competitors at a regulated cost-based price. Under the current MTA, telecommunications services are now largely affected by FCC requirements and market forces; the 2005 MTA revisions created a singe form of retail local service subject to rate regulation, primary basic local exchange service.[7]

The data for 2010 shows the total number of wirelines provided by ILECs and CLECs in Michigan was 3,627,513. This accounts for a decrease of about 280,000 lines from 2009 which aligns with the average annual loss of lines over the past decade. From the data compiled for 2010, staff found that the number of lines provided by CLECs via their own facilities, through

[6] 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.

[7] 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.

unbundled network element loops (UNE-L),[8] through local wholesale arrangements (LW), and through resale of incumbent providers' services was 1,032,595. CLEC lines accounted for 28.5 percent of the total lines in 2010. AT&T Michigan's share was 57.1 percent (2,071,144 lines)[9] while Frontier's share was 10.5 percent (380,078 lines). The small independent telephone companies represented the remaining 3.9 percent (143,696 lines) of the total lines in Michigan (Figure 1).

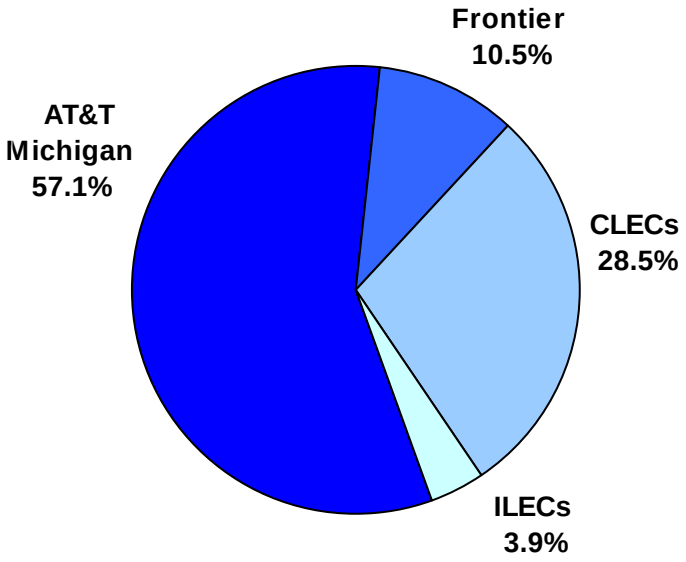

Figure 1: Michigan Market Share in 2010

The Commission continues to license new CLECs, and as of the end of 2010, CLECs were providing service to 28.5 percent of the wirelines provided to customers in Michigan. This is a significant increase from last year. On March 21, 2011, the FCC released its latest report to date on *Local Telephone Competition: Status as of June 30, 2010*. For the Michigan companies that are required to report this data to the FCC, the ILECs reported 2,802,000 switched access lines and 150,000 voice over Internet protocol (VoIP) lines for a total of 2,952,000 lines,[10] while the CLECs reported 471,000 switched access lines and 1,267,000 VoIP lines which amount to 1,738,000 lines, for a total of 4,690,000 lines.

[8] 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.

[9] 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.

[10] The total lines reported by the ILECs to the FCC differ from the lines reported to the Commission due, in part, to the difference in the date the lines were reported.

From the most recent data available from the FCC, the CLECs' share of Michigan's lines including interconnected VoIP was 37 percent as of June 30, 2010. One hundred twenty nine switched providers reported data to the FCC, 27 ILECs along with 112 CLECs, and 75 interconnected VoIP providers. The provider participation with the FCC in compliance with the FCC reporting requirements significantly increased this year.

The chart of the Michigan survey results, Figure 2, categorizes the CLECs according to the number of customer lines that they served in 2010. The data indicates that of the 132 CLECs reporting, 58 (44 percent) were serving no Michigan customers in 2010. A second group of 28 CLECs (21 percent) served between one line and 1,000 lines. A third group served between 1,001 and 10,000 lines each and is comprised of 30 CLECs (22 percent), and the last group of CLECs served over 10,000 lines each and represents 16 CLECs (12 percent).

CLECs With No Lines	58	44%
CLECs With 1 – 1,000 Lines	28	21%
CLECs With 1,001 – 10,000 Lines	30	22%
CLECs With over 10,000 Lines	16	12%
Total CLECs Responding to Survey	132	100%

Figure 2: The 2010 Michigan Survey Results

Figure 3 represents the data gathered by the Commission over the past 12 years. As is shown, while total wirelines have consistently decreased since 2001, the actual number of CLEC providers and CLEC lines in Michigan grew over the first six years that this information was gathered; the CLEC market grew from a four percent share to a peak of 27.5 percent share at the end of 2004. However, for 2005, 2006 and again in 2008, Michigan experienced decreases in CLEC lines. In 2009, Michigan's competitive lines rebounded and grew to slightly under a million lines. For 2010, the increasing competitive lines trend continued due, in part, to the higher interconnected VoIP provider participation in this year's data request.

Year	Licensed CLECs	CLEC Replies	CLECs with Lines	CLEC Lines	Total Michigan Lines	CLEC %	AT&T Michigan %	Frontier %	ILECs %
1999	120	59	23	268,385	6,726,971	4.0	81.0	11.5	3.5
2000	167	69	31	446,164	6,901,813	6.5	78.0	12.0	3.5
2001	173	102	42	896,023	7,014,263	12.8	72.2	11.5	3.5
2002	219	113	54	1,447,176	6,668,124	21.7	62.9	11.9	3.6
2003	192	112	70	1,677,423	6,334,114	26.5	57.7	11.2	4.5
2004	202	127	77	1,681,173	6,103,250	27.5	56.9	11.8	3.7
2005	188	142	78	1,158,550	5,471,708	21.2	62.6	12.3	3.9
2006	210	116	63	961,460	5,260,443	18.3	65.5	12.3	3.9
2007	202	146	94	1,013,897	4,904,384	20.7	63.5	11.8	4.0
2008	203	122	67	859,370	4,286,071	20.0	64.2	11.5	4.3
2009	190	129	79	947,068	3,907,129	24.2	60.8	10.7	4.3
2010	190	132	74	1,032,595	3,627,513	28.5	57.1	10.5	3.9

Figure 3: Michigan Public Service Commission CLEC Survey Results

For the last four years, competitive telecommunications companies reliant on the incumbent's network to provide service, whether it be via resale, wholesale or UNE-L provisioning, have increasingly focused on the business side of the telecommunications marketplace as is represented in Figure 4. From the total lines provided in

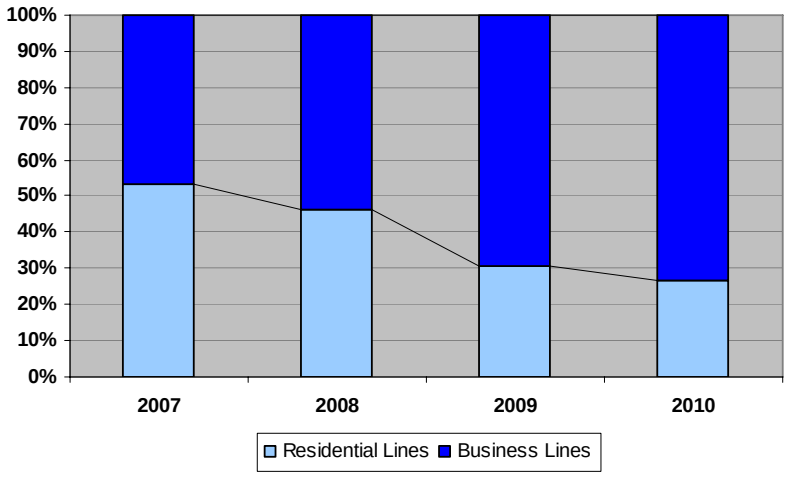

Figure 4: Competitive Residential and Business lines via ILEC

conjunction with the incumbent's network in 2010, almost three quarters are business lines and a little over a quarter are residential lines. In contrast, the lines provisioned over the CLECs' own network represent the opposite combination of residential and business lines. The competitive lines provisioned over their own network without relying on the incumbent's infrastructure continue to be more predominant in the residential telecommunications marketplace in Michigan as is shown in Figure 5. In 2009, CLECs as a total served more business lines than residential lines for the first time since the year 2000. The increase in business lines trend began in 2003 and it was more evident in the lines provisioned via the incumbents' network where two-thirds of the lines were business lines. The residential lines provisioned over the CLECs' own facilities accounted for almost three-fourths of the total facilities-based lines. In 2010, however, the percentage of residential competitive lines is higher than the percentage of business competitive lines.

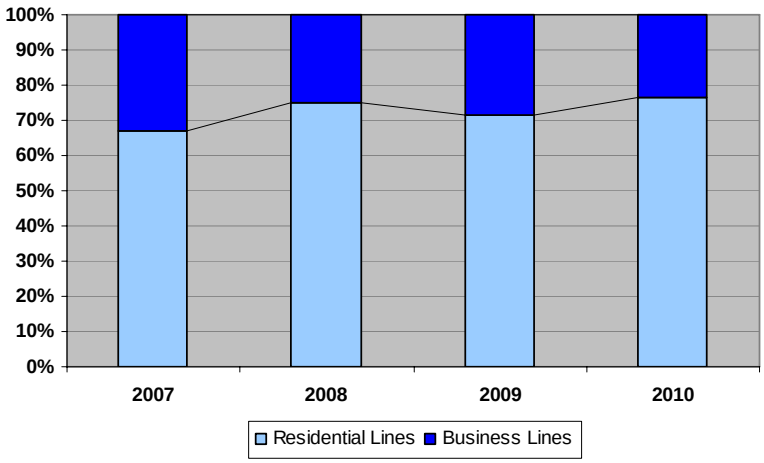

Figure 5: Competitive Residential and Business lines provisioned via CLECs' own facilities

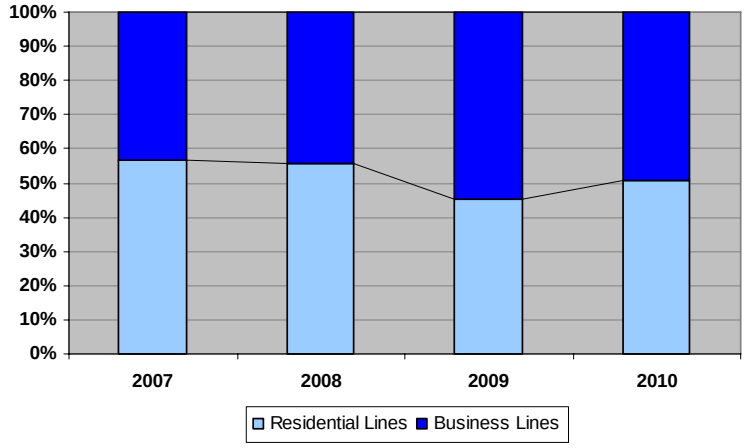

Figure 6: Total Residential and Business Competitive lines

In 2010, the number of CLEC lines provided over their own facilities continued to increase while the lines provisioned over the incumbents' network slightly decreased, as reflected in Figure 7. The increase of competitive lines provisioned over CLECs' own facilities began in 2005. The existence of this type of provisioned lines is an indication that the provider has the intent of remaining in the marketplace for the long term as the initial investment to provision those lines is higher than the investment necessary to provision those same lines utilizing the incumbent's network. As reported in the previous report, even though there was a slight loss of competitive lines for 2008, a portion of those lines were recovered due, in part, to the continued investment by the CLECs in developing their networks which represents an important economic activity that benefits Michigan and points toward further stabilization of Michigan's competitive telecommunications market.

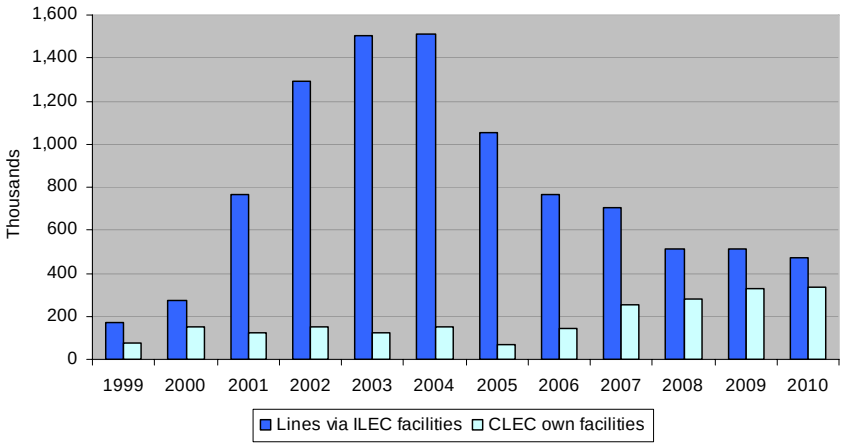

Figure 7: Competitive lines

The evolution of Michigan lines in the last 12 years is represented in Figure 8. The chart indicates growth for the CLECs during the first six years while at the same time declining market share for AT&T Michigan. This inverse correlation occurred while UNE-P, an economical method of provisioning lines to customers, was available. However, for 2005, 2006 and 2008, CLEC lines decreased while market share for AT&T Michigan grew slightly. The decrease of competitive lines in 2008 was not anticipated to continue long term; hence in 2009 and again in 2010, a recovery of those competitive lines was experienced. The Commission is encouraged

that the facilities-based competition in Michigan will continue to maintain a stable competitive environment.

As reflected in Figure 8, over the last four years, Frontier and AT&T Michigan have experienced a steady decrease in their reported lines while the small ILECs experienced a moderate decrease of lines over the same period.

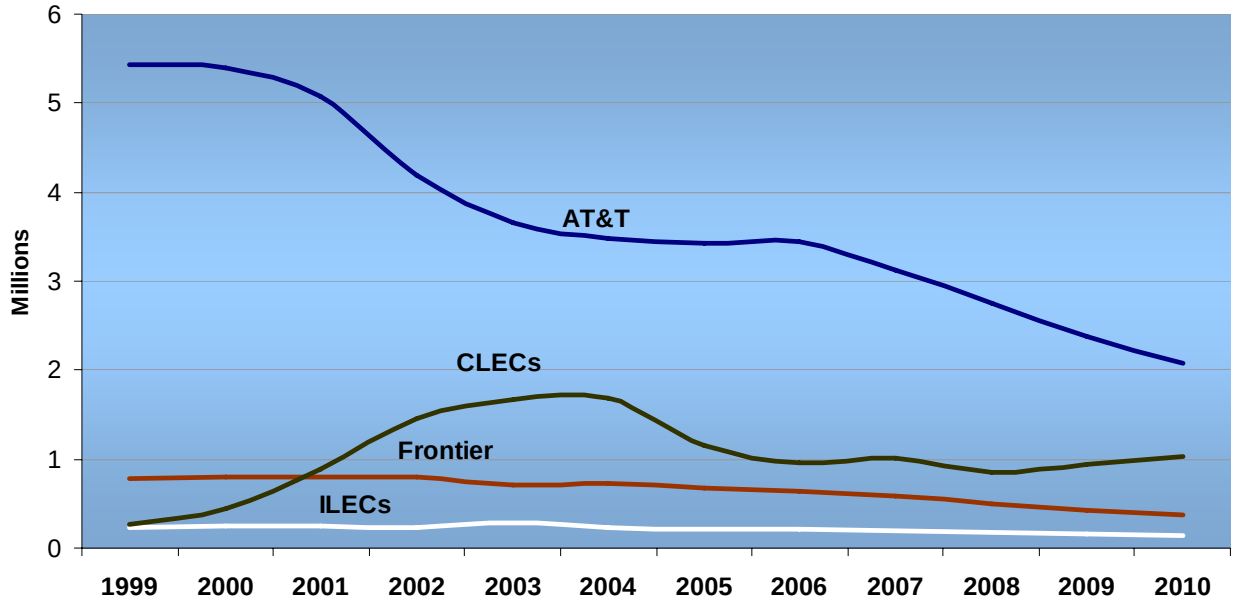

Figure 8: Michigan Lines Evolution, 1999-2010

The total number of customers served via wireline technology continues to decrease following a trend that began in 2002. Historically, providers have asserted that the decline in total wirelines was due to the increase in mobile wireless users[11] and the use of other types of telephony including VoIP, as well as a movement away from using dial-up Internet to high-speed connections. The Commission believes there is merit in this argument, however, it is worth noting that many many telecommunications companies are offering one or more of these

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

additional services (wireless, VoIP, Internet connections) provided through their own company or an affiliate which does not necessarily report to the Commission.

Mobile Wireless (Voice)

Pursuant to the MTA, the Commission does not regulate mobile wireless providers. Consequently, in preparing this report the Commission must rely on wireless data obtained from other sources.[12] The FCC prepares a semiannual Local Telephone Competition Report that includes data on the number of mobile wireless telephone providers and subscribers in Michigan. The data from the FCC's most recently released report, *Local Telephone Competition: Status as of June 30, 2010*, is current through mid-year 2010 and shows that Michigan continues to see an increasing number of mobile wireless subscriptions (*see* Figure 9). According to this FCC data, there were approximately 8,690,000 mobile wireless telephone subscribers in Michigan as of June 30, 2010. Michigan continues to experience steady growth in the number of mobile wireless subscriptions, though that growth is no longer at the peak levels Michigan experienced from 2000-2006 (*see* Figure 10).

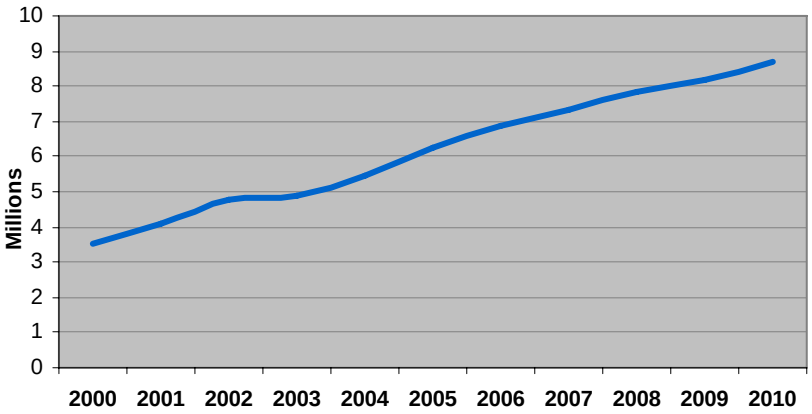

Figure 9: Number of Mobile Wireless Subscriptions in Michigan. FCC Data

[12] While this report discusses the potential impact of the wireless market on wireline competition, the Commission maintains its position that mobile wireless service is not a functional equivalent to wireline service for all citizens in Michigan due to issues related to coverage, ability for 911 operators to locate callers, and communications during power outages.

The Centers for Disease Control and Prevention's National Center for Health Statistics (NCHS), released its most recent data on wireless substitution in the report *Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, January – June 2010.* The NCHS data shows that 26.6 percent of American households, representing approximately 57 million adults and 21 million children, had at least one wireless phone but no landline telephone during the first half of 2010.

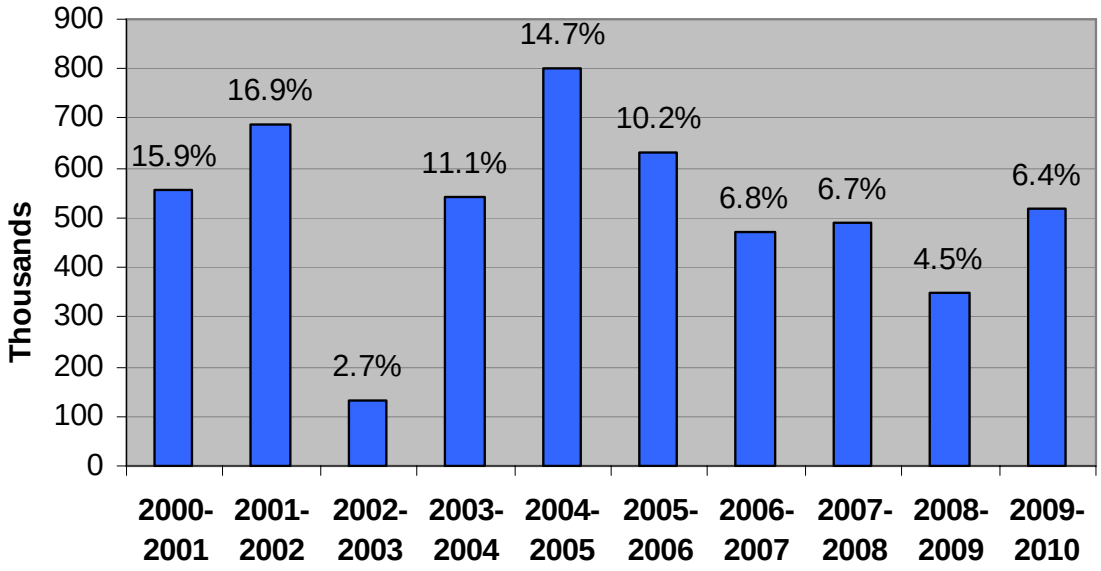

Figure 10: Change in Mobile Wireless Subscriptions in Michigan. FCC Data

The report notes the continuing trend of increasing numbers of wireless-only households nationwide. The report also provides evidence that younger adults are much more likely to "cut the cord" than older adults. For example, for the January – June 2010 period, the NCHS reports that more than half (51.3 percent) of U.S. adults aged 25-29 lived in a wireless-only household while only 5.4 percent of adults ages 65 and older did.

While the Commission does not yet consider mobile wireless to be a complete functional equivalent to wireline service for all customers, it is the case that mobile wireless is becoming a truly competitive alternative to wireline service for an increasing number of Michigan customers.

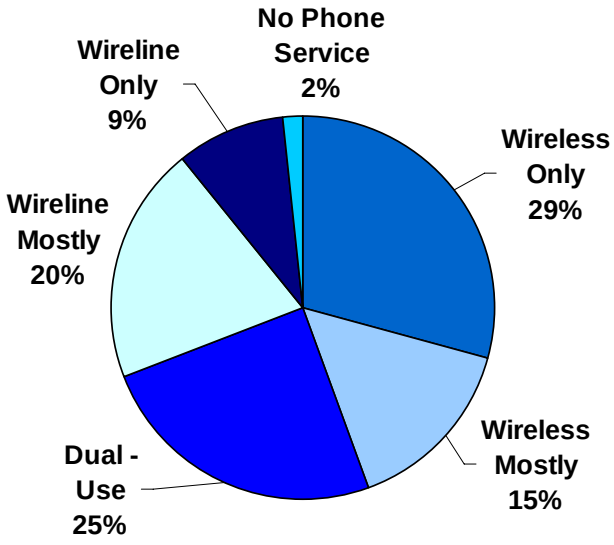

Figure 11: Estimates of the Percent Distribution of Household Telephone Status for Adults in Michigan July 2009-June 2010. National Center for Health Statistics Data

The NCHS has also released modeled state level estimates on the distribution of household telephone status of adults and children in its April 20, 2011 report *Wireless Substitution: State-level Estimates from the National Health Interview Survey, January 2007-June 2010.* The National Center for Health Statistics' modeled estimates show that between July 2009 and June 2010, 29.2 percent of adults in Michigan and 35.6 percent of children in Michigan were living in a wireless-only household. Michigan is above the national averages of 23.9 percent of adults and 27.5 percent of children living in wireless-only households for the same period. According to the report, the National Center for Health Statistics models estimate that from July 2009 through June 2010 44.5 percent of adults were living in a wireless-only or wireless-mostly household, 24.7 percent in a household where a mobile wireless phone and a wireline phone are used equally, and 29 percent report living in a household that is landline-only or landline-mostly (*see* Figure 11).

The FCC has not yet released its Fifteenth Annual Report and Analysis of Competitive Market Conditions with Respect to Commercial Mobile Radio Service (CMRS Report) and therefore there is no updated wireless penetration data available. The data presented last year is reproduced in Figure 12 below for convenience. [13]

Figure 12: Wireless Penetration Rate
Source: FCC Eleventh, Twelfth, Thirteenth, Fourteenth CMRS Reports

Economic Area	2005 **(based on US Census 2000 population data)**	2006 **(based on US Census 2006 population estimates)**	2007 **(based on US Census 2007 population estimates)**	2008 **(based on US Census 2008 population estimates)**
57	85%	96%	100%	105%
58	41%	56%	65%	*
59	63%	72%	85%	92%
61	58%	66%	71%	77%
62	63%	68%	73%	78%
65	59%	67%	74%	78%
Nationwide	71%	80%	86%	90%

* Data withheld to maintain firm confidentiality.

Michigan counties make up all or part of six Economic Areas. Below is a list of which counties are contained in each Economic Area that covers Michigan:

EA 57

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

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

[13] As noted last year, the penetration rates for 2006 through 2008 are not directly comparable to 2005 due to the FCC's use of U.S. Census 2000 actual population data to calculate 2005 penetration rates, whereas for the 2006, 2007 and 2008 penetration rates, the FCC used the U.S. Census 2006, 2007 and 2008 *estimated* population numbers, respectively.

EA 59

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

EA 61

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

EA 62

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

EA 65

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

As noted in previous years' reports, wireless penetration rate is not evidence of coverage in all areas and due to the large geographic area encompassed by Economic Areas, the FCC's data only allows for generalizing about wireless service in Michigan.[14] The FCC's CMRS Reports include maps showing wireless coverage. The Commission finds that the best indicators of wireless coverage are the interactive provider coverage maps available on mobile wireless providers' websites. Many of these maps can show detail of coverage at the level of individual street addresses and are updated as providers roll out additional towers or new technologies.

In addition to wireless voice service, mobile wireless can provide customers with other services including texting, multimedia messaging, email, Web browsing, and numerous other applications. Broadband service via mobile wireless is discussed in more detail in the Broadband section of this report. Data on mobile wireless consistently show that this technology continues to be a driving force in the telecommunications marketplace. While state-level data is difficult to obtain, the Commission will continue to the best of its ability to monitor and report on the impact of mobile wireless voice service on telecommunications services in Michigan.

[14] For instance, some areas overlap states and/or include both suburban and rural areas.

Voice over Internet Protocol

Voice over Internet Protocol is both a technology and a service. There are two main types of VoIP service: interconnected VoIP technology, which allows a customer to make and receive calls from the public switched telephone network (PSTN); and non-interconnected VoIP technology in which calls do not use the PSTN. Aside from companies that offer only VoIP service, VoIP service is also often available from cable companies, some traditional telephone companies, and providers of broadband Internet services. Marketing literature available from a cross-section of these different types of providers shows that VoIP service offerings include residential and business local and long distance calling, as well as features such as international calling, voicemail, call forwarding, etc. However, while VoIP service is in many ways similar to traditional wireline service, two significant differences are important to highlight. VoIP customers may need to provide location or other information to their VoIP providers, and update this information if they change locations, for their VoIP 911 service to function properly.[15] Additionally, VoIP services typically entail the use of a modem that requires electricity. Therefore, VoIP service may not function during an electrical outage while traditional wireline telephone service typically would. The MTA includes a registration requirement for providers of VoIP services. The Commission maintains an online registration system, the *Intrastate Telecommunications Service Provider Registry*, to help providers meet this requirement.

The Commission's CLEC survey collects information on the number of VoIP lines provisioned by licensed CLECs and the data shows a greater use of this technology as a method for serving customers. Providers reporting VoIP lines on the CLEC survey reported an increase of 180 percent over 2009 in the number of VoIP lines, with 197,990 VoIP lines reported for

[15] The FCC has a Consumer Advisory, available at http://www.fcc.gov/cgb/consumerfacts/voip911.pdf that explains important information regarding VoIP service and access to 911 emergency services.

2010. As noted in past reports, the Commission is aware of certain companies (some cable companies, un-licensed subsidiaries of licensed CLECs, other types of providers) that offer VoIP but do not report these lines on the Commission's CLEC survey. Previously the Commission had no way to determine the number of these lines, but in recent years has estimated the number to be in the several hundred thousands.

The FCC, however, has expanded its reporting requirements and began mandating reporting by interconnected VoIP providers in December 2008. The greater response of providers offering VoIP on the Commission's CLEC survey may be, in part, due to the fact that the FCC has required providers to report the number of VoIP lines they are provisioning. The FCC data, available in the *Local Telephone Competition* report, confirms our estimations in previous years that the number of VoIP lines in Michigan was significant. In fact, the FCC reports that as of June 30, 2010, there were 75 providers of interconnected VoIP serving just over 1.4 million interconnected VoIP lines in Michigan. Interconnected VoIP is increasingly becoming a competitive option for some customers (with the caveats about 911 service and service during electricity outages), not just in Michigan, but nationwide. The FCC shows that nationwide the number of interconnected VoIP service subscriptions has increased by approximately 33 percent from December 2008 to June 2010, while traditional retail switched access lines decreased 13 percent.

There are many issues of interest to the Commission related to VoIP, including federal universal service funding, 911 functionality and funding, and compensation for traffic exchange between providers. These topics are under the primary jurisdiction of the FCC and debate on these topics continues at the federal level. The Commission continues to follow developments at

the federal level and monitor any affects of federal policy regarding VoIP service on telecommunications competition in Michigan.

Broadband

Overview

The Commission monitors the development of broadband technologies, but does not have regulatory authority over these types of services. As such, the Commission must rely on external data sources when analyzing the state of broadband in Michigan. As reported last year, the FCC has recently made significant revisions to its process for collection of broadband data. These changes include 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. The FCC has begun reporting the results of the enhanced data collection efforts in its Internet Access Services Reports. These reports replace the *High-speed Services for Internet Access* reports that covered 2000-2008 data. The most recent of these reports, *Internet Access Services: Status as of June 30, 2010* compiles broadband data submitted on the FCC's Form 477 through mid-year 2010.

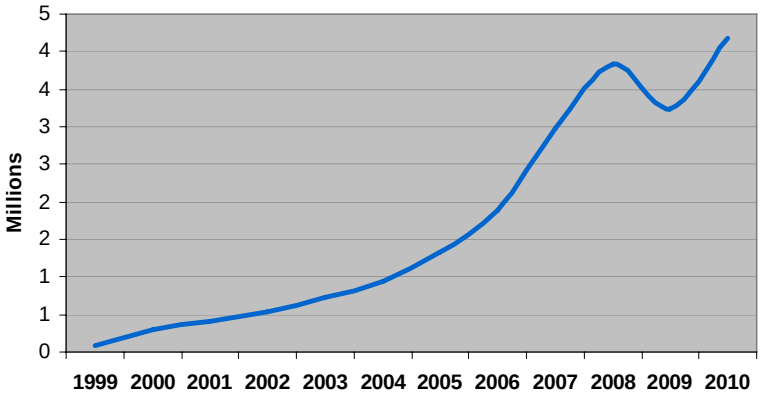

Figure 13: Number of High-speed Internet Lines in Michigan. (FCC Data)

According to the FCC's *High-speed Lines Report*, Michigan again ranks 12th in the country in

the number of Internet access lines offering at least 200kbps in at least one direction, with 99 different providers reporting 4,185,000 lines as of June 30, 2010 (*see* figure 10).[16] Residential connections represent 82 percent of the total connections with speeds of at least 200kbps in one direction in Michigan, with business connections comprising the remaining 18 percent. The FCC estimates that DSL service is available to 75 percent of Michigan residences where ILECs offer local telephone service and 96 percent of residences where cable providers offer cable television service. This compares with nationwide percentages for DSL and cable broadband availability of 84 percent and 97 percent, respectively.

Figure 14 represents the growth in Internet access lines offering speeds of at least 200kbps in at least one direction by technology type for the four reporting periods since the FCC changed its data collection methodology. As the figure shows, each technology platform continues to see growth in the number of lines served, though the most dramatic increase is in the number of high-speed Internet access lines provisioned with mobile wireless, the number of which nearly doubled (a 99.9 percent increase) between June 2009 and June 2010.

[16] As explained last year, with the modifications to the types of data collected with Form 477, the data shows a one-time decrease (2008-2009) in the reported number high-speed Internet access service connections. In previous reports, the FCC counted a device that was capable of sending or receiving data as a mobile wireless high-speed Internet connection. However, this did not take into account that some customers with these types of devices do not subscribe to mobile wireless broadband service. The revised Form 477 considers a person to have a mobile wireless broadband connection if they have a capable device and subscribe to a plan that allows for transferring data to and from Internet sites and excludes subscribers with plans that only allow for content that is for viewing on a mobile device such as text messaging.

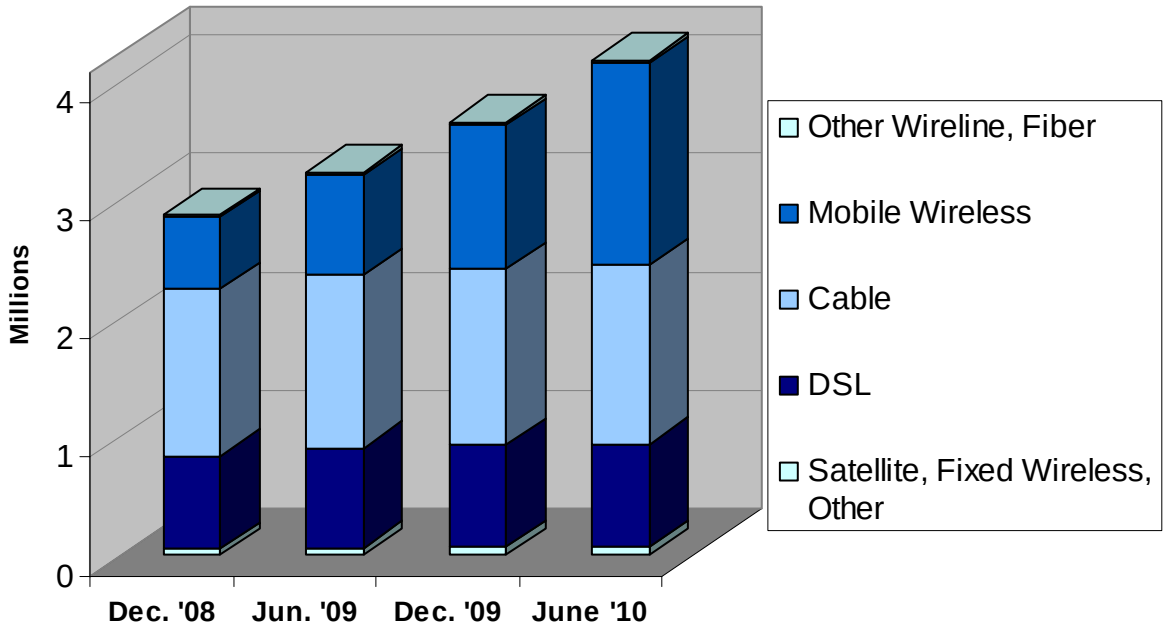

Figure 14: Number of Internet Access Lines at least 200kbps in one direction by Technology in Michigan (FCC Data)

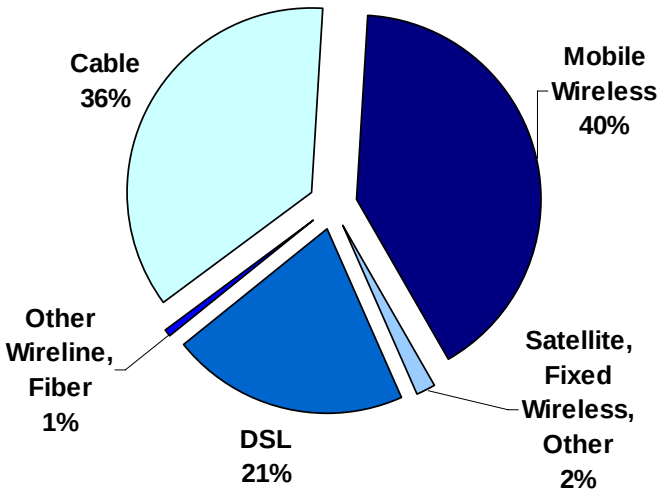

Figure 15: Percent of Michigan Internet Access Lines at least 200kbps in one direction by Technology (FCC Data)

Just as consumers are continuing to choose to use mobile wireless voice to complement or replace traditional wireline voice, expanded geographic coverage for data as well as the continued popularity of smart phones and wireless cards for computers allows consumers to

supplement or replace a wired Internet connection with mobile wireless. Mobile wireless connections continued to make up the largest portion of the total lines offering speeds of at least 200kbps in at least one direction in Michigan, representing 40 percent of the total as of June 30, 2010. Cable, 36 percent, and DSL, 21 percent, make up most of the remainder. The percentage of lines offering 200+kbps in at least one direction by technology is shown in Figure 15. However, for connections with greater speeds, mobile wireless loses the dominant position to cable; the FCC reports that 91 percent of June 30, 2010 Michigan connections with speeds of at least 3mpbs downstream/768kbps upstream are cable connections.

In previous reports, the Commission has provided information about the one broadband over power line (BPL) provider offering service in Michigan of which it is aware. Midwest Connections, a subsidiary of Midwest Energy Cooperative, is working to continue deploying BPL, according to a notice to customers dated December 2010 and published on its BPL webpage.[17] The Commission will continue to monitor and provide updates on the status of BPL projects in Michigan.

The growing number of Internet access connections in Michigan show that Michigan citizens and businesses increasingly value broadband service. Understanding why individuals and businesses do or do not adopt broadband is an important factor in increasing broadband adoption rates and ensuring that this vital technology is accessible, not just physically available, to all. There are many factors that can act as a barrier to adoption, even where service is available, such as price, lack of a device with which to access the Internet, privacy or security concerns, or a lack of interest/understanding what broadband access to the Internet offers. Determining the barriers to adoption and recommending solutions to overcome these challenges

[17] Website accessed on May 24, 2011 showing "An Update for our Customers."

is a goal of the Commission's Connect Michigan project, which is discussed in more detail later in this report. There continues to be vibrant growth in the broadband sector of the telecommunications market, and the Commission will continue to monitor the developments in this area, as well as the effects of additional broadband availability and adoption on wireline telephone competition in Michigan.

Proposed Federal Universal Service and Intercarrier Compensation Reform

Broadband, both fixed and mobile, continues to be a driving force in nationwide telecommunications policy, and federal policy makers are seeking to address telecommunications policies such that they do not provide a disincentive toward a continued transition to a broadband-centric market. On February 8, 2011, the FCC adopted a Notice of Proposed Rulemaking (NPRM) seeking comment on significant reforms to both the federal universal service fund and the intercarrier compensation system. Through the NPRM, the FCC sought comment on including broadband as a supported service. Additionally, the FCC sought comment on intercarrier compensation, a portion of which Michigan has enacted through the 2009 amendment to the MTA reforming intrastate access charges. The MPSC has filed multiple rounds of comments on the NPRM to ensure that Michigan's interests are represented. These comments to the FCC are available on the MPSC's website. Depending on the outcome of that FCC proceeding, there could be significant impacts on the greater telecommunications and broadband marketplace in Michigan. As always, the MPSC will continue to monitor and participate in this and any other FCC proceedings of interest to Michigan.

American Recovery and Reinvestment Act Funded Broadband Projects

Infrastructure, Public Computing Centers, Sustainable Adoption

As described in last year's report, the American Recovery and Reinvestment Act of 2009 (ARRA) included funding for broadband projects. The National Telecommunications and Information Administration (NTIA) received $4.7 billion to establish a Broadband Technology Opportunities Program (BTOP) for awards to eligible entities to develop and expand broadband services to rural and underserved areas and improve access to broadband by public safety agencies. The Rural Utilities Service received $2.5 billion to provide broadband in unserved and underserved communities via the Broadband Initiatives Program (BIP), which offers grants, direct loans and loan grant combinations. The Commission, along with other state departments, was involved in the analysis, planning and review of the federal broadband applications that pertain to Michigan.

Projects specific to Michigan received a total of $178,124,588 in grants or grant/loan combination awards for broadband infrastructure, computer centers, and sustainable broadband adoption.[18] Additionally, Michigan is included in the applications of seven other grantees along with various other states under the same application. The following chart shows federal grants awarded under the BTOP or BIP programs for broadband infrastructure, public computer centers, or sustainable broadband adoption that include Michigan:

[18] Additional information about Michigan BTOP projects is available at http://www2.ntia.doc.gov/michigan. Additional information about Michigan BIP projects can be found on 37-39 of the USDA's report *Advancing Broadband: A Foundation for Strong Rural Communities.*

Awards Specific to Michigan			
Entity	**Program**	**Type of Funding**	**Amount**
Air Advantage	BIP Infrastructure - Last Mile	Loan	$32,300,000
		Grant	$31,950,000
Allband Communications Cooperative	BIP Infrastructure - Last Mile (2)	Grant	$9,730,657
Bloomingdale Communications, Inc.	BTOP Infrastructure	Grant	$5,646,473
Chatham Telephone Company	BIP Infrastructure - Last Mile Remote	Grant	$8,605,935
Climax Telephone Company	BIP Infrastructure - Last Mile	Loan	$1,072,501
		Grant	$2,144,998
Communication Corporation of Michigan	BIP Infrastructure - Last Mile	Grant	$1,221,811
Crystal Automation Systems, Inc. (Casair)	BIP Infrastructure - Last Mile	Loan	$7,949,227
		Grant	$18,548,197
Eastern Upper Peninsula Intermediate School District	BTOP - Sustainable Adoption	Grant	$3,165,207
Merit Network, Inc.	BTOP - Infrastructure	Grant	$33,289,221
Michigan State University	BTOP - Public Computer Centers (2)	Grant	$6,952,301
	BTOP - Sustainable Adoption	Grant	$5,215,507
Island Telephone Company	BIP Infrastructure - Last Mile	Grant	$2,001,528
Southwest Michigan Communications	BIP Infrastructure - Last Mile Non-remote	Loan	$4,165,513
		Grant	$4,165,512

Awards Including Michigan			
Entity	Program	Type of Funding	Amount
Communication Service for the Deaf, Inc.	BTOP - Sustainable Adoption	Grant	$14,988,657
EchoStar XI	BIP - Satellite	Grant	$14,159,250
Hughes Network Systems	BIP - Satellite	Grant	$58,777,306
Merit Network, Inc.	BTOP - Infrastructure	Grant	$69,639,291
One Community	BTOP - Sustainable Adoption	Grant	$18,701,771
One Economy Corporation	BTOP - Sustainable Adoption	Grant	$28,519,482
University Corporation for Advanced Internet Development	BTOP - Infrastructure	Grant	$62,540,162

Broadband Mapping and Planning – Connect Michigan

In addition to the two programs discussed above, the ARRA provided funding for broadband mapping and planning. The NTIA received $350 million to establish the State Broadband Data and Development Program under the Broadband Data Improvement Act of 2008 to promote broadband mapping and planning at the state level. The Commission joined with Connected Nation, a national leader in broadband mapping, to develop the Connect Michigan program, a comprehensive broadband mapping initiative. The Commission was instrumental in Michigan's efforts to receive a $1.8 million grant from the NTIA on December 22, 2009 to fund the Connect Michigan program. In addition to providing state and county level broadband availability maps, the broadband data collected by Connect Michigan supports the National Broadband Map. The Connect Michigan project also includes research that will guide planning efforts to spur private investment in unserved areas as well as increase the utilization of

broadband in Michigan. Additional information about the project is available on the Commission's Web site at michigan.gov/broadbandmapping and at connectMI.org.

On May 20, 2010, the Commission announced the completion of Michigan's first broadband availability map aimed at promoting technology development and increasing high-speed Internet availability and adoption throughout the state. Along with various static maps, an interactive mapping application, called BroadbandStat, allows consumers to easily search for high-speed Internet service providers at their home address, service providers to make informed expansion decisions, and state and federal policymakers to target resources to unserved and underserved communities.[19] The Commission recently celebrated the one-year anniversary of the interactive map with the release of a Consumer Alert designed to increase awareness of the project.[20]

In addition to mapping, a significant effort of the Connect Michigan program is to increase state-level research on broadband adoption. Connect Michigan completed an initial survey of both residences and businesses in the state to determine the broadband adoption rate in the state, as well as to try to pinpoint the reasons many citizens that have broadband available at their home do not yet subscribe to the service. The results of these surveys are available online.

Mergers and Acquisitions

There is a continuing trend of significant consolidation in the telecommunications sector. Following is a discussion of the announced or completed transactions in 2010 among companies with customers in Michigan.

As noted in last year's report, on May 13, 2009, Verizon Communications Inc., announced plans to divest its wireline business in 14 states including Michigan, to Frontier

[19] *See* Commission press release dated May 20, 2010.
[20] *See* Commission press release dated May 20, 2011.

Communications Corporation. In May 2010, the FCC approved the transfer of assets between the two companies with conditions and the transaction was completed and effective July 1, 2010. Frontier Communications Corporation subsequently notified the Commission that the new names of Verizon North Inc. and Contel of the South, Inc. d/b/a Verizon North Systems were Frontier North Inc. and Frontier Midstates Inc., respectively. Long distance customers of the former Verizon North and Verizon North Systems were transferred to New Communications Online, which became Frontier Communications Online and Long Distance Inc. Frontier Communications of Michigan, Inc. continues to operate in the state as a separate subsidiary of Frontier. The MCI entities including MCImetro Access Transmission Services, LLC, d/b/a Verizon Access Transmission Services were not a part of the Verizon-Frontier transaction and continue to be owned and operated by Verizon in Michigan. In April 2011, the Commission was notified by Frontier of an Operations Support Systems Integration whereby Frontier will transition its operations systems used to support its customers in Michigan and three other states from Verizon's network to the Frontier network. This transition is targeted to take place in October 2011.

In September 2010, PAETEC announced its intention to buy Cavalier Telephone. Cavalier has one of the country's largest fiber networks, owning 17,000 miles. Consummation of the indirect transfer of control, which included Cavalier subsidiaries Talk America, LDMI and Intellifiber to PAETEC Holding Corp. was completed in December 2010.

In September 2010, the Commission received notification that a transfer of assets including customers from Comtel Telcom Assets LP to Matrix Telecom, Inc. was completed in August 2010.

In October 2010, Birch Telecom of the Great Lakes, Inc. dba Birch Communications, CloseCall America, Inc. and American Fiber Network, Inc. notified the Commission of the transfer of customers and assets from CCA & AFN to Birch. The transaction closed on December 17, 2010.

Also in October 2010, Ace Telephone filed an application with the Commission to expand its service area to acquire the assets and customers of Peninsula Telephone Company. The Commission granted the license expansion on December 21, 2010. Effective December 31, 2010, the FCC granted authorization for transaction and effected customers and have been transferred to Ace.

CenturyLink Inc. completed its purchase of Qwest Communications International Inc. on April 1, 2011. The resulting combined CenturyLink, will have approximately 15 million landlines, making it the third largest provider of wirelines in the nation.

Additionally, AT&T has announced its intentions to acquire T-Mobile. The FCC has issued a public notice on the proposed transaction. Next year's report will include more detailed information regarding this transaction.

Conclusion

In 2010, Michigan's competitive wireline market share increased to 28.5 percent which continues to keep Michigan in the top ten states regarding competition levels. This also keeps Michigan well ahead of its neighboring states of Illinois, Indiana, Ohio and Wisconsin. This bodes well for the kind of environment the MTA has created to keep Michigan competitive in the telecommunications market. Similar to last year, facilities-based competition has continued to increase through investment by the CLECs in developing their networks which is a positive economic sign.

The competitive landscape in Michigan has significantly changed over the last several years but Michigan has been able to maintain its position as one of the top states as far as the levels of telecommunications competition due to the recognition of technological advancements and forward looking policies that have been adopted in changes to the MTA over the years.

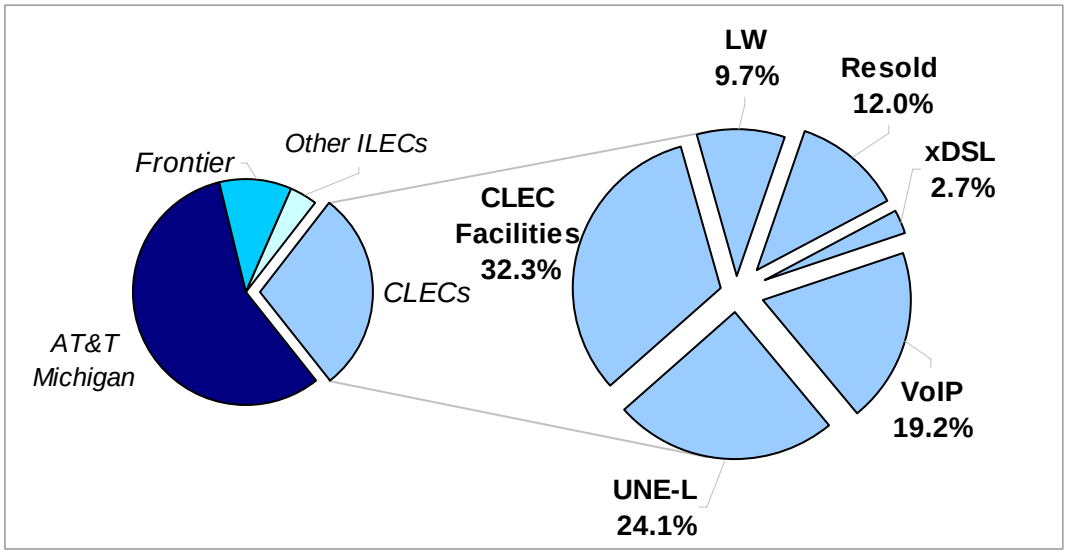

Figure 16: Michigan competitive landscape in 2010

The chart in Figure 16 depicts the competitive landscape in Michigan for 2010. Services provided over CLEC facilities accounts for 32.3 percent of the provisioning, while VoIP accounts for almost 20 percent. The remainder is accounted for by provisioning using ILEC facilities through UNE-L and resale methods.

While it is a national trend that telecommunication services provided over a traditional wireline is decreasing, there still exists a fairly large number of consumers in Michigan using this technology today which indicates a continued need and desire for wireline services. However, with the growing use of services provided over wireless and VoIP technologies, the Commission strives to strike a balance to position Michigan to reap the benefits of new technologies while at

the same time preserving a quality wireline system for those for whom never technologies are currently unavailable or unaffordable.

The Commission continues to carry out its duties under the MTA as well as monitoring current developments on the national level and keeping abreast of the ever changing technological developments in the industry to ensure that Michigan consumers have telecommunication service choices available to them. Should any issue arise that may warrant action, the Commission will apprise the Governor and the Legislature.