



AGENDA

Committee on Intergovernmental Relations Tuesday, September 6, 2016 @ 3:30 p.m. Council Conference Room; City Hall 10th Floor

Councilmember Adam Hussain, Chair
Councilmember Judi Brown Clarke, Vice Chair
Councilmember Tina Houghton, Member

1. Call to Order

2. Public Comment

3. Approval of Minutes

- August 2, 2016

4. Discussion/Action:

A.) RESOLUTION - Support of HR 182 and CR15 to Shut Down Line 5

B.) Discussion –
City TV
AT & T Michigan
Comcast

5. Other

6. Adjourn



MINUTES
Committee on Intergovernmental Relations
Tuesday, August 2, 2016 @ 3:30 p.m.
10th Floor Conference Room, City Hall

CALL TO ORDER

The meeting was called to order at 3:32 p.m.

ROLL CALL

Council Member Adam Hussain, Chair
Council Member Judi Brown Clarke, Vice Chair
Councilmember Tina Houghton, Member- arrived at 3:36 p.m.

OTHERS PRESENT

Sherrie Boak, Council Staff
Kristen Simmons, Assistant City Attorney
Edward Gunther, MSU Rowing
Thaddeus Owen, Moores River Dr. Association
Zach Russell, Lansing Parks and Recreation
Eric Novak, Moores River Dr. Association/Waterski Club
Brett Kaschinske, Parks and Recreation Director

PUBLIC COMMENT ON AGENDA ITEMS

Public Comment will be discussed at each agenda item.

MINUTES

MOTION BY COUNCIL MEMBER BROWN CLARKE TO APPROVE THE MINUTES FROM JULY 19, 2016 AS PRESENTED. MOTION CARRIED 2-0.

DISCUSSION –

Wake Policy and Safe Boating on the Grand River

Council Member Hussain recapped the last meetings where the Committee has held discussions on noise, speed and what to do to mitigate. At the last meeting the two (2) Sergeants from the Lansing Dive team were present and spoke of their tasks and offered their assistance directly to the residents in attendance. The last meeting provided information on the speed limit of 55 mph, the current noise ordinance on the books, and the reasons it cannot be enforced due to lack of noise meter, training and adequate evidence to hold up in court. The dive team did state reckless driving can be enforced but it would be difficult, and they have to wait at the launch to cite the boater. Currently the LPD has acknowledged it is a low priority.

Options the Committee has discussed included a wake policy which has now been determined is not an option because of the need for multi jurisdiction support, lack of enforcement support currently and unintended consequences.

Second option discussed was distribution and placement of flyers/pamphlets, which too was not supported because of litter and how to disseminate.

The last option is signage and the Committee held further discussions on wording and placement. An earlier email recommendation on language from Mr. Gunther was forwarded to Mr. Kaschinske. A sample sign was distributed. The Committee reviewed the proposed and the recommendation from Mr. Gunther. The Committee consensus was to use the clear minimal language provided by Mr. Gunther adding "Violations could result in fines up to \$2,000" then citing the Michigan law code for that.

Add "safe" to the line item for "Distance" and remove "of 100 feet", so now states " You must maintain a safe distance from the shoreline..."

Mr. Kaschinske opened the discussion on where the 100' begins, and also on placement of the sign where it can be enforced. Mr. Gunther cited the Michigan law that states the 100' begins where the depth becomes 3' or less. He also asked that the rowing team was looking for ropes from there out so the area is denoted in the water. The Committee determined it would be hard to place markers, therefore it will be noted at the launch. Mr. Kaschinske confirmed the sign could be 12" x 17" but he did not recommend anything larger than poster size. The sign will be placed east of the launch.

Council Member Houghton also asked that the sign include the statement "No wake from sun up to sun down".

Mr. Novak asked for a sign to be placed at Grand River Park which touches MLK. Mr. Kaschinske did not support that location, because the complaints have been the users, which are launching. The violators do not appear to be the residents or the boat club.

Council Member Wood had not additional comments to the conversation but did ask when the sign would go up. Mr. Kaschinske confirmed he will expedite, however will not promise a specific date.

Council Member Hussain asked Mr. Kaschinske to update the Council when the language is done, the sign is done and when it is placed. Council Member Brown Clarke also asked that the idea be revisited by IGR in May, 2017 to see the effect of the sign. Mr. Novak asked how Council was going to determine if it was working, and Mr. Hussain clarified they will review based on the same matrix the discussion started with resident input and complaints.

AT&T Michigan Annual Video Report and Attorney Opinion

Council Member Hussain outlined the task that was assigned to the Committee. Currently the residents pay a franchise fee on their bills, but do not get the programming and the City is spending the franchise funds. Council Member Wood outlined the history, which began 10/8/2008 when the Council approved the franchise agreement with AT & T which goes into PEG funds charged at 2% of the gross revenues. The agreement delineates the fact that AT&T is supposed to provide a channel that can be utilized by the community, their customers. At the time AT&T gave the City the Channel 99, and Council was not pleased with the placement so the City filed a suit against AT&T for a better number. They also continued to collect franchise dollars, even though they had not gotten a channel. Council Member Wood also referred to another case from 2008 called the Bolt decision, which was a rain fee and that outcome was that it was not a fee, it was a tax and a violation.

The first question to Law is if the case has been settled yet, and if it has, why is the City not on the channel roster. Ms. Simmons confirmed she had a conversation with Mr. Abood and Mr. Smiertka who assured her the issue was resolved, but at this point they are being told the City needs to address equipment issues. An email communication was sent to Dominic Cochran from Law for an update on the equipment, however there has been no response.

Council Member Brown Clarke noted that if the channel has been “released” it is similar to uploading to the live stream. Council Member Wood also noted that if the case is settled, and the City is spending the money from AT&T and Comcast, there should not be a hold up on the equipment. Been collecting since 2008, 2%, spent it and not provided a service.

Council Member Hussain requested staff to invite Comcast and Mr. Cochran to a future meeting in September. AT&T will also be invited to address the channel and equipment issues.

Council Member Wood also noted there are other issues to address with Comcast which include quality of shows, sometimes it stops or freezes, no live stream. Comcast needs to address if this is a network issue or equipment issue.

Council Member Houghton asked if Council can pursue surveying the residents before the next contract is up. Council Member Wood suggested a website survey or robocall.

Council Member Hussain confirmed the Committee with have the vendors in and Mr. Cochran before pursuing a survey.

Submitted by,
Sherrie Boak, Recording Secretary,
Lansing City Council

Approved by the Committee on _____

Adjourn 4:16 p.m.



CLEAN WATER ACTION

MICHIGAN

To: Governor Rick Snyder, Attorney General Bill Schuette, MDEQ Director Dan Wyant and Members of the Michigan Petroleum Pipeline Task Force

From: Clean Water Action

Subject: Request that the Pipeline Task Force recommend that Enbridge's Line 5 be permanently decommissioned for its threat to the economy and environment

Cause for Concern

Line 5, which carries nearly 23 million gallons of light crude oil and natural gas liquids through the Straits of Mackinac every day¹ has not been replaced since it was constructed over 6 decades ago. The location of the pipeline along the 10km Straits of Mackinac connects Lakes Michigan and Huron into a single hydraulic system where an oil spill would severely impact both lakes. According to Enbridge Energy's emergency response plans, it would take the company a minimum of 8 minutes to shut down the ruptured pipeline and isolate the flow of oil.² They estimate that given this "worst case" scenario, **1.5 million gallons of oil and gas would be released into the Great Lakes.** However, while it may take Enbridge 8 minutes to shut the pipeline down, it could take considerably longer for them to identify that a rupture occurred. During the 2010 Kalamazoo River spill which released over 1 million gallons of oil along 40 miles of the river watershed, **operators did not shut Line 6B down for 17 hours** and in fact increased the pressure in the pipeline resulting in more discharged oil as they mistakenly interpreted a warning signal.

Given this recent track record and that the U.S Pipeline and Hazardous Materials Safety Administration (PHMSA) has initiated **28 enforcement actions against Enbridge** over the past decade alone resulting in millions of dollars in fines, the chances of an oil spill greater than 1.5 million gallons is highly probable and would have significant economic, social and environmental impacts for the Great Lakes.³ Additional information obtained from PHMSA and a 2013 National Wildlife Federation dive along Line 5 highlighted some of the structural defects that had previously gone unnoticed:⁴

- Line 5 had at least 2,400 known defects as of 2011
- Less than 12 percent of the known defects have been inspected
- A "pinhole" leak was detected in the Upper Peninsula which released an undetermined amount of natural gas liquid that was vaporized into the atmosphere⁵

Unfortunately, PHMSA has been unwilling to provide details of where these defects are, claiming that transparency poses a threat to national security. This lack of transparency increases the economic and environmental harm as it is nearly impossible to predict where an oil spill will occur along Line 5.

The Importance of the Lakes

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- 1) Ellison, G. Michigan officials seek assurances from Enbridge on safety of Straits oil pipeline. Mlive.com. 2014. Available at http://www.mlive.com/news/index.ssf/2014/04/michigan_officials_seek_assura.html Accessed on May 12, 2015.
 - 2) Alexander, Jess, and Beth Wallace. "Sunken Hazard: Aging Oil Pipelines Beneath The Straits of Mackinac An Ever-Present Threat To The Great Lakes." *National Wildlife Federation* (2012): 2-5.
 - 3) Congressional Hearing on "Enbridge Pipeline Oil Spill in Marshall, Michigan". Committee on Transportation and Infrastructure, One Hundred Eleventh Congress, September 15, 2010 available at <http://www.gpo.gov/fdsys/pkg/CHRG-111hrg58236/pdf/CHRG-111hrg58236.pdf>
 - 4) Great Lakes Commission. [Issue Brief 3]. "Crude Oil Transport: Risks and Impacts." September 2014
 - 5) Office of Attorney General Bill Schuette. [Press Release]. "Wyant, Scheteet issue statement on Enbridge U.P. pipeline incident following Pipeline Task Force Meeting." December 2014.

The lakes and their connecting channels contain 20 percent of the world's supply of freshwater and 90 percent of the freshwater of the U.S. serving as a drinking water source for over 35 million people.⁶ The high quantity and quality of freshwater is responsible for:

- One out of every five jobs in Michigan
- \$1.2 billion in visitor spending in 2013⁷
- A total of \$18 billion in economic benefits
- 50 billion gallons of water delivered daily for industrial, agricultural and municipal use
- 525,000 jobs including agriculture, fisheries and shipping/transportation delivering⁸

According to the Michigan State University Extension, **“Tourism is one of Michigan's largest income industries based on the millions of travelers' dollars spent, generation of state and local taxes, and nearly 150,000 jobs it creates.”**⁹ If the 6 decade old Line 5 pipeline were to rupture, the time it would take for environmental and economic recovery would place many people's' livelihoods at risk. Furthermore, the true time to complete social recovery is highly unknown due to the hydrological uncertainties of the Straits of Mackinac as described by research scientist David Schwab in a 2014 University of Michigan study; **“if you were to pick the worst possible place for an oil spill in the Great Lakes, [the Straits of Mackinac] would be it.”**¹⁰

Unique Attributes of the Straits of Mackinac Add Substantial Risk

The flow of water through the Straits play an important role in water quality, contaminant transport, navigation, and ecological process which are imperative in maintaining the biodiversity and ecosystem functionality of the Lakes. **The oscillating currents in the Straits will have a strong influence on the transport of oil released in the event of a spill**, moving eastward into Lake Huron or westward into Lake Michigan depending the vertically bi-directional flow in the Straits during summer and fall.¹¹ Special characteristics of the Straits which would make containing an oil spill highly problematic include:

- Currents in the Straits can be as strong as currents in the Detroit river (1 m/sec)
- Currents tend to reverse direction between eastward and westward every few days
- At its peak, the rate of water which flows through the Straits (80,000 m³/sec) is 10 times greater than the flow of the Niagara River.¹²
- The Straits freeze during winter which would trap the oil below the ice

Twenty days after an initial rupture from Line 5, oil could spread as far southeast as Roger's City in Lake Huron and as far west as Beaver Island in Lake Michigan.¹³ “An oil spill in the Straits of Mackinac would have devastating consequences for people, fish and wildlife, and the economy.

Public Trust Issue:

Line 5 was built in 1953, **prior to the adoption of the Great Lakes Submerged Lands Act**. Subsequently, the pipelines' owner, Enbridge, has never had to go through the Great Lakes Bottomlands Permitting process, required by the Act, to determine the risks of Line 5 to the public trust. If Enbridge sought to construct Line 5 today it would have to go through the permitting process to ensure that the pipeline would

6) University of Wisconsin, Sea Grant Institute. “Great Lakes and Wisconsin Water Facts

7) Pure Michigan. “Great Lakes.” Available at <http://www.michigan.org/news/great-lakes> Accessed May 12, 2015.

8) NOAA. “About Our Great Lakes: Great Lakes Basin Facts.”

9) Michigan State University, Extension. “Tourism.” Available at <http://bookstore.msue.msu.edu/topic/info/tourism> Accessed May 12, 2015.

10) Anderson, Eric J., and David J. Schwab. “Predicting the oscillating bi-directional exchange flow in the Straits of Mackinac.” *Journal of Great Lakes Research* 39.4 (2013): 663-671.

11) Anderson, Eric J., and David J. Schwab. “Predicting the oscillating bi-directional exchange flow in the Straits of Mackinac.” *Journal of Great Lakes Research* 39.4 (2013): 663-671.

12) Schwab, David. “Research report for the National Wildlife federation great lakes regional center”. University of Michigan Water Center. 2014.

13) Schwab, David. “Research report for the National Wildlife federation great lakes regional center”. University of Michigan Water Center. 2014.

not pose a threat to the surrounding water bodies or to the public's use of the water such as fishing and other recreational activities. To date, **Enbridge has not been required to ensure that Line 5 would not pose a threat for its occupation** along the Great Lakes bottomlands.

Enbridge is putting the integrity of the Great Lakes in danger for its own benefit. Any sort of leakage from Line 5 could spew toxins into the Great Lakes, the largest cluster of freshwater lakes in the world. The Great Lakes region is

- Home to 10 percent of the U.S. population and 30 percent of Canada's population
- Provides habitat for various species of flora and fauna, several of which are endangered or threatened.

When Line 5 was constructed, the state retained the right to terminate the easement and order the pipeline removed if Enbridge failed to meet all stated conditions. In 2014, Enbridge admitted to violating the easement by not installing the required anchoring structures every 75 feet. These structures are very necessary in the event of a strong storm which have been occurring with increased frequency over the last several years and due to the turbulent hydrological conditions in the Straits of Mackinac. **Line 5 poses a significant threat to the continued survival of the Great Lakes and must be met with an appropriate response, which warrants decommission.**

Municipalities that have passed resolutions to shut down Line 5

Cities & Villages

Alpena (City of), MI
Ann Arbor (City of), MI
Boyer City (City of), MI
Charlevoix (City of), MI
Cheboygan (City of), MI
Detroit (City of), MI
East Jordan (City of), MI
Empire (Village of), MI
Frankfort (City of), MI
Mackinaw City (Village of), MI
Mackinac Island (City of), MI
Northport (Village of), MI
Petoskey (City of), MI
Rogers City (City of), MI
Sault Ste. Marie (City of), MI
Tawas City (City of), MI
Traverse City (City of), MI
Warren (City of), MI

Counties

Alcona County, MI
Alger County, MI
Alpena County, MI
Antrim County, MI
Cheboygan County, MI
Chippewa County, MI
Emmet County, MI
Genesee County, MI
Grand Traverse County, MI
Ingham County, MI
Iosco County, MI
Macomb County, MI
Presque Isle County, MI
Wayne County, MI

Townships

Alpena Township, MI
Beaugrand Township, MI
Benton Township, MI
Blaine Township, MI
Bois Blanc Island Township, MI
Burt Township, MI
Centerville Township, MI
Charlevoix Township, MI
Clark Township, MI
Empire Township, MI
Grant Township, MI
Hayes Township, MI
Inverness Township, MI
Krakow Township, MI
Leelanau Township, MI
Mentor Township, MI
Moran Township, MI
Munising Township, MI
Presque Isle Township, MI
Suttons Bay Township, MI
Tuscarora Township, MI
Waterford Township, MI
West Bloomfield Township, MI

WHEREAS, Line 5 is a set of twin, 62-year-old pipelines owned by Enbridge that carry light crude oil and natural gas under the Straits of Mackinac; and

WHEREAS, the currents in the Straits of Mackinac at peak volumetric transport can be more than 10 times greater than the flow of Niagara Falls and switch bi-directionally from east to west every few days, and according to a 2014 University of Michigan study are the “worst possible place” for an oil spill in the Great Lakes; and

WHEREAS, the Great Lakes contain 20 percent of the world’s fresh, available, surface water and are a drinking water source for over 35 million people; and

WHEREAS, one out of every five jobs in Michigan is linked to the high quality and quantity of fresh water in the Great Lakes; and

WHEREAS, tourism is one of Michigan’s largest income industries bringing in billions of travelers dollars spent each year; and

WHEREAS, agriculture, fisheries, shipping and industry depend on the health of the Great Lakes; and

WHEREAS, in 2009 the Great Lakes were linked to over 1.5 million jobs, with Michigan accounting for 35 percent of those jobs; and

WHEREAS, Enbridge has a shaky track record that includes 1,244 reportable spills, leaks and releases from 1996 to 2013; and

WHEREAS, Enbridge was in violation for their spacing requirements of its 1953 easement for Line 5 in 2014 and were responsible for a pinhole leak in a section of the pipeline north of the Straits in December 2014; and

WHEREAS, Enbridge was responsible for one of the worst and most expensive oils spills in U.S. history when Line 6b ruptured near Kalamazoo in 2010 allowing almost 1 million gallons of tar sands oil to leak for 17 hours before shutting down the line; and

WHEREAS, corrosion is the number one reason that pipelines fail; and

WHEREAS, Line 5 was built before the Great Lakes Submerged Lands Act was adopted so it didn’t have to obtain a permit and ensure that the pipeline wouldn’t pose a threat to the waters or the public’s use of the waters; and

WHEREAS, Michigan’s Attorney General Bill Schuette has stated (in regards to Line 5) that the “pipeline wouldn’t be built today” and that “the pipeline’s days are numbered”; and

WHEREAS, the Coast Guard Commandant testified before congress in 2015 that the Coast Guard would be unable to respond effectively to an open water oil spill in the heart of the Great Lakes; and

WHEREAS, there is no plan for how to recover oil if there was a leak during the winter when the lakes are covered with ice; and

WHEREAS, as Michiganders we have a responsibility to be wise stewards of the waters of our state for generations to come; and

WHEREAS, protection of Michigan's water supplies and resources is better accomplished by prevention of contamination and environmental degradation, rather than attempting to clean up contamination and restore degraded environments after the fact;

NOW, THEREFORE, BE IT RESOLVED, that on the 8th day of August, 2016, the City of Lansing supports stopping the transportation of oil under the Great Lakes; and

BE IT FURTHER RESOLVED, that the City of Lansing supports shutting down Line 5 and the flow of oil under the Great Lakes, and

BE IT FURTHER RESOLVED, that the City of Lansing supports H.R. 182 and C.R. 15 introduced by State Representatives Sarah Roberts and Jeff Irwin calling on Governor Rick Snyder and Attorney General Bill Schuette to shut down Line 5, and

AND BE IT FURTHER RESOLVED that the City of Lansing will send a letter to Governor Rick Snyder, Attorney General Bill Schuette, our State Representatives, State Senators and U.S. Senators calling on them to take swift action to shut down Line 5.

PASSED, APPROVED, AND EFFECTIVE on this ____ day of ____, 2016.

ATTEST:

Mayor

Council President

PLEASE SEND A COPY OF THIS SIGNED RESOLUTION TO:

1. [Governor Rick Snyder]
2. [Attorney General Bill Schuette]
3. [town's state representatives]
4. [town's state senators]
5. [US Senators]
6. [Clean Water Action]



RECEIVED

2016 JUL 18 PM 5: 22

LANSING CITY CLERK

Jim Murray
President
AT&T Michigan
221 N. Washington Square
Lansing, MI 49833
Office: (517) 334-3400
Fax: (517) 334-3429

July 15, 2016

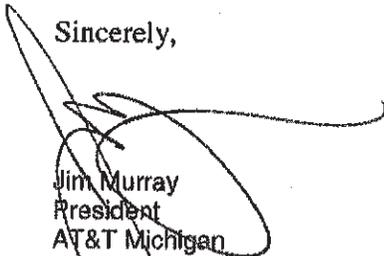
Ms. Kavita Kale
Executive Secretary
Michigan Public Service Commission
PO Box 30221
Lansing, MI 48909

Dear Ms. Kale:

Michigan Bell Telephone Company, doing business as AT&T Michigan ("AT&T"), submits its Ninth Annual Video Report to the Michigan Public Service Commission ("MPSC") and franchising entities in the State of Michigan regarding its deployment progress, as required by Michigan's Uniform Video Services Local Franchise Act (2006 Public Act 480, as amended) or "Video Act". AT&T is separately providing a copy to each Clerk in the Michigan Communities where AT&T has launched its U-verseSM TV service.

If you have any questions, please contact me on (517) 334-3400 or Yvette Collins on (517) 334-3708.

Sincerely,



Jim Murray
President
AT&T Michigan

Enclosures

cc: Clerks in Franchised Communities
Ms. Robin Ancona, Michigan Public Service Commission Staff
Mr. Ryan McAnany, Michigan Public Service Commission Staff
Ms. Yvette Collins, AT&T Michigan



9th Annual

AT&T Michigan
Annual Video Report

July 15, 2016

STATUS OF AT&T'S VIDEO SERVICE DEPLOYMENT IN MICHIGAN

Michigan Bell Telephone Company, doing business as AT&T Michigan ("AT&T"), submits its Ninth Annual Video Report to the Michigan Public Service Commission ("MPSC" or "Commission") and franchising entities in the State of Michigan regarding its deployment progress, as required by Michigan's Uniform Video Services Local Franchise Act (2006 Public Act 480, as amended) or "Video Act".¹

On January 1, 2007, Michigan's Video Act became effective. On January 31, 2007, as required by the Video Act, the MPSC approved the standardized form for the uniform video service local franchise agreement as developed by the MPSC Staff after soliciting input from all interested parties.

In March of 2007, AT&T began submitting franchise agreements in accordance with the Video Act to local governments, using the form approved by the MPSC. After these initial agreements became effective, AT&T launched its Internet Protocol TV (IPTV) service called AT&T U-verse® TV on May 21, 2007 in parts of over 50 communities in the Detroit and Ann Arbor areas. AT&T has now obtained franchise agreements and has launched its U-verse TV in 340 communities.

Section 9(2)(b) of the Video Act provides that it is a defense to an alleged violation of Section 9(1) of the Video Act if a provider has met either of two conditions: (1) within 3 years at least 25% of households with access to the provider's video service are low-income households; or (2) within 6 years and from that point forward at least 30% of households with access to the provider's video service are low-income households. AT&T has met both conditions.²

With respect to Section 9(3) of the Video Act: (1) AT&T provided access to its video service to over 50% of the households in its telecommunications service area within 6 years of the date it began providing video service, and (2) AT&T Michigan no longer has more than 1,000,000 telecommunications access lines in the state.³

AT&T recently completed its ninth year of providing video service in the state, and the deployment of the service has been significant. In Michigan, AT&T currently provides access to its video service to over 50% of the households in its telecommunications service area (however, AT&T's subscription rate is less than 30%). Of these households with access to AT&T's video service in Michigan, over 35% are low-income households as defined by the Video Act. AT&T does not deny access to service to any group of potential residential subscribers because of race or income.

¹ See Section 9(4) of the Video Act: "Each provider shall file an annual report with the franchising entity and the commission regarding the progress that has been made toward compliance..."

² See Section 9 (2) of the Video Act: "It is a defense to an alleged violation of subsection (1) if the provider has met either of the following conditions: (a) Within 3 years of the date it began providing video service under this act, at least 25% of households with access to the provider's video service are low-income households. (b) Within 5 years of the date it began providing video service under this act and from that point forward, at least 30% of the households with access to the provider's video service are low-income households."

³ "If a video service provider is using telecommunication facilities to provide video services and has more than 1,000,000 telecommunication access lines in this state, the provider shall provide access to its video service to a number of households equal to at least 25% of the households in the provider's telecommunication service area in the state within 3 years of the date it began providing video service under this act and to a number not less than 50% of these households within 6 years. A video service provider is not required to meet the 50% requirement in this subsection until 2 years after at least 30% of the households with access to the provider's video service subscribe to the service for 6 consecutive months."

Since its launch in 2007 through the end of the 1st quarter of 2016, AT&T has paid more than \$148 million to the local governments, made up of \$11.5 million in video franchise fees and \$33 million in public, education and government (PEG) fees.

AT&T'S INVESTMENT IN MICHIGAN'S WORKFORCE AND INFRASTRUCTURE

AT&T invests billions to build the advanced networks that create jobs and fuel economic growth. From 2013 through 2015, AT&T invested nearly \$1.65 billion in its Michigan wireless and wireline networks.

AT&T'S U-verse® TV PRODUCT

AT&T's U-verse TV network architecture and technology is fundamentally different from a legacy cable TV system. AT&T's U-verse TV is Internet Protocol TV (IPTV), which is based on the common language of the Internet. IP gives U-verse a significant advantage over older, cable-based platforms.

U-verse delivers both real-time video programming and on-demand and interactive content that IPTV makes possible. Customers are enjoying many benefits of the platform, like Total Home DVR³ and multi-screen⁴ content. In addition, AT&T extends its U-verse TV brand across screens with Uverse.com and the U-verse App for smartphones and tablets.

Here are some highlights of latest U-verse TV offerings:

- Michigan U-verse TV customers can enjoy access to more than 245 HD channels. U-verse customers can receive HD-ready equipment, according to their package, and most packages include an HD-ready DVR.
- Customers can use the U-verse App on numerous devices, including wearables. Michigan customers can watch more than 255 live channels inside the home and more than 215 live channels outside the home.
- AT&T's deployment of Public, Educational, and Government (PEG) continues. AT&T works closely with all communities who have requested AT&T to carry their PEG programming on U-verse TV.

³ Total Home DVR (Digital Video Recorder). See: <http://www.att.com/u-verse/explore/total-home-dvr.jsp> for more details. An AT&T U-verse customer can record 4 shows at once on a single DVR, record and play back shows from any room in the home, pause a recorded show in one room and pick it up in another and program the DVR remotely from the computer or wireless phone.

⁴ See: <http://www.att.com/esupport/article.jsp?sid=KB402261&cv=813> for more details. This innovative feature allows the viewer to track four shows all at one time, on one screen. A customer may access Multiviews for Sports, News and Kids, etc., depending upon the programming purchased.

AT&T's U-verse offers multiple combinations of TV, Internet and Voice packages to customize the customer's experience. U-verse TV offers several programming packages including U-basic, U-200, U-200 Latino, U-300, U-300 Latino, U-450, and U-450 Latino packages, plus U-family, a family-friendly programming option. The customer may choose from a variety of subscription options that feature a wide variety of channels, including music, local, movie and sports programming, as well as premium Spanish-language and international packages.

All of these packages include high definition or HD-capable equipment, and most packages include an HD digital video recorder (DVR), easy to use parental controls, built-in picture-in-picture, video on demand, games like sudoku and solitaire. For a summary of all of the interactive applications, go to:

uverse.com/apps

ADDITIONAL AT&T U-verse® TV INFORMATION

For additional information on AT&T U-verse TV, to see a demonstration of how it works or to see the popular bundles, visit the website below. Customers may also call 800-ATT-2020.

<http://www.att.com/u-verse/>

Customers may find the following AT&T websites helpful for further information regarding channel lineup, availability of AT&T U-verse TV or to check the status of their installation or repair order:

- AT&T U-verse TV channel lineup:

<http://www.att.com/u-verse/shop/channel-lineup.jsp>

- AT&T U-verse TV availability:

<http://www.att.com/u-verse/availability/>

- U-verse TV Customers have the ability to check status of their installation or repair order via an online tool at:

<http://www.att.com/u-verse/appointmentstatus>