Rough Draft

Minutes

THOMAS TOWNSHIP PLANNING COMMISSION
Thomas Township Public Safety Building, 8215 Shields Drive, Saginaw, MI 48609
December 16, 2015 at 7:00 p.m.

Rod Iamurri called the Planning Commission meeting to order at 7:00 p.m.

Present in addition to Mr. Iamurri were: Ruth McDonald, Diane LaMountain, David Sommers, Dale Halm, Pat Lynch and Steve Yockey. Also present were Dan Sika, Director of Community Development, Connie Watt, Planning Assistant/Code Enforcement Officer, and Rob Eggers, Spicer Group.

1. ***Call to Order and Roll Call***

2. ***Pledge of Allegiance.***

3. ***Approval of Agenda:***

It was moved by Halm, seconded by McDonald to approve the Agenda for the December 16, 2015 meeting. Motion carried unanimously.

4. ***Approval of Minutes:***

It was moved by LaMountain seconded by Sommers to approve the minutes of November 18, 2015 as presented. Motion carried unanimously.

5. ***Communications – Petitions – Citizens Comments*** **– None.**

6. ***Presentations-None***

7. ***Sign Board of Appeals-None***

8. ***Hearings***

   A. ***Amendment to the Zoning Ordinance Section Chapter 18, Special Land Use Permit; Section 18.34, "Wireless Communication Facilities"***

Iamurri opened the Public Hearing at 7:02 p.m. Iamurri addressed the members stating that an Ordinance Committee Meeting had been held on December 8th, 2015 at 10:00 a.m. At that time the changes to the Ordinance were discussed. It had been decided that one of the changes they wanted to see was the Zoning Districts which would allow for Wireless Communication Towers. It was decided that they would be allowed only in Business and Manufacturing districts. Further,

the setback requirement was discussed and an agreement of 1 ½ times the height would be the standard. Sommers questioned a need for a change or correction in Section b (1) (b) to specify the maximum of 200'. It was agreed that the section needed to add "not to exceed 200' maximum" after the statement regarding overall height to read , b) The proposed collocation would not increase the overall height of the support structure by more than 20 feet or 10 percent of the original height ***not to exceed 200' maximum,*** whichever is greater; A handout was provided to the Planning Commission regarding health concerns raised by a concerned individual at the last Planning Commission meeting. The study was completed by the American Cancer Society and found no link to health risks from cell towers. (copy follows-Insert #1) There was no public comment regarding the amendment so the Public Hearing was closed at 7:06 p.m. Motion made by McDonald, supported by Sommers to recommend approval of the proposed amendment to the Thomas Township Zoning Ordinance, Chapter 18, Section 18.34 "Wireless Communication Facilities" with the addition of the change mentioned above, b) The proposed collocation would not increase the overall height of the support structure by more than 20 feet or 10 percent of the original height ***not to exceed 200' maximum,*** whichever is greater. Motion carried unanimously.

B. Amendment to the Zoning Ordinance Chapter 12, Business Districts; Section 12.5, "B-5 Exclusive Business District Uses; Uses By Right".

Iamurri opened the Public hearing at 7:08 p.m. He asked Sika to explain the amendment. Sika stated that when the Ordinance update was done by Cindy Windland a couple of years ago, a change was inadvertently made in the "Uses By Right" for a B-5. This type of district Sika explained was where you'd find golf courses, or ski resorts. He mentioned that he'd received a call from someone who currently lives in the B-5 district which prompted him to look at the "Uses By Right". At that time he noticed the omission or change that had been made. He said the amendment was to add back in One-and two-family dwellings meeting the requirements of the R-1 and R-2 residential districts. Also on the figure 15 that accompanies this section, the word "Principle" as in structure should read "Principal" so that too requires a change. With no public comment, Iamurri closed the Public hearing at 7:10 p.m. A motion was made by Sommers, supported by Lynch to recommend approval of the proposed text amendments to the Thomas Township Zoning Ordinance, Chapter 12, Business Districts, Section 12.5 "Exclusive Business District Uses; Uses By Right". Motion carried unanimously.

C. Amendment to Zoning Ordinance, Chapter 14, Gratiot Road Design Guideline Overlay District; Section 14.1, "Guidelines"; sub-section (g).

Iamurri opened the Public hearing at 7:11 p.m. Sika explained that there was some concern with the amount of fencing allowed between pillars. Right now at thirty-two feet (32') there was the possibility of settling or having the simulated wrought iron shift and droop to ruin the aesthetics of it. This change would reduce the amount of fencing allowed between the pillars to alleviate this problem. He added that this Ordinance has been a work in progress and as new issues are

learned of they are addressed. With no public comment the Public hearing was closed by Iamurri at 7:14 p.m. A motion was made by Halm and supported by McDonald to recommend approval of the text amendment to the Thomas Township Zoning Ordinance, Chapter 14, Gratiot Road Design Guideline Overlay District; Section 14.1, "Guidelines"; sub-section (g). Motion carried unanimously.

9. Sign Board of Appeals-None

10. New Business

A. February Planning Commission Meeting Date Change.

Sika advised the Planning Commission that he was informed today by the Township Manager that this change in the February meeting date was no longer needed so the date would remain Wednesday, February 17th, 2016.

11. Old Business

A. Master Plan Update-Continuation from Previous Meetings

Rob Eggers of Spicer Group addressed the Planning Commission on the results of the Thomas Township Community Survey that is part of the Master Plan update that is currently being done. With the survey ending on November 25, 2015, there was a total of 264 responses, 242 completed responses for a completion rate of 92%. Eggers presented a "Power Point" that detailed the results of the survey for review and discussion (a copy of the presentation follows-Insert #2).

Eggers distributed a copy of the current goals and objectives of the Master Plan. He requested that the Planning Commission read and review the information prior to the February meeting at which time any addition or change in goals will be discussed as well as future land use.

12. Receive and File All Correspondence-Planning & Zoning News-November 2015.

13. Adjournment

Motion by Sommers seconded by Halm to adjourn the meeting at 7:52 p.m. Motion carried unanimously. ***The next meeting date is January 20, 2016.***

Respectfully submitted by Connie Watt, Planning Assistant/Code Enforcement Officer

Insert #1

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1-800-227-2345 | www.cancer.org

Cellular Phone Towers

Cellular (cell) phones first became widely available in the United States in the 1990s, but since then their use has increased dramatically. The widespread use of cell phones has led to cell phone towers being placed in many communities. These towers, also called *base stations*, have electronic equipment and antennas that receive and transmit radiofrequency (RF) signals.

How do cellular phone towers work?

Cell phone base stations may be free-standing towers or mounted on existing structures, such as trees, water tanks, or tall buildings. The antennas need to be high enough to adequately cover the area. Base stations are usually from 50-200 feet high.

Cell phones communicate with nearby cell towers mainly through radiofrequency (RF) waves, a form of energy in the electromagnetic spectrum between FM radio waves and microwaves. Like FM radio waves, microwaves, visible light, and heat, they are forms of non-ionizing radiation. This means they cannot cause cancer by directly damaging DNA. RF waves are different from stronger types of radiation such as x-rays, gamma rays, and ultraviolet (UV) light, which can break the chemical bonds in DNA.

At very high levels, RF waves can heat up body tissues. (This is the basis for how microwave ovens work.) But the levels of energy used by cell phones and towers are much lower.

When a person makes a cell phone call, a signal is sent from the phone's antenna to the nearest base station antenna. The base station responds to this signal by assigning it an available radiofrequency channel. RF waves transfer the voice information to the base station. The voice signals are then sent to a switching center, which transfers the call to its destination. Voice signals are then relayed back and forth during the call.

How are people exposed to the energy from cellular phone towers?

As people use cell phones to make calls, signals are transmitted back and forth to the base station. The RF waves produced at the base station are given off into the environment, where people can be exposed to them.

The energy from a cellular phone tower antenna, like that of other telecommunication antennas, is directed toward the horizon (parallel to the ground), with some downward scatter. Base station antennas use higher power levels than other types of land-mobile antennas, but much lower levels than those from radio and television broadcast stations. The amount of energy decreases rapidly as the distance from the antenna increases. As a result, the level of exposure to radio waves at ground level is very low compared to the level close to the antenna.

Public exposure to radio waves from cell phone tower antennas is slight for several reasons. The power levels are relatively low, the antennas are mounted high above ground level, and the signals are transmitted intermittently, rather than constantly.

At ground level near typical cellular base stations, the amount of RF energy is thousands of times less than the limits for safe exposure set by the US Federal Communication Commission (FCC) and other regulatory authorities. It is very unlikely that a person could be exposed to RF levels in excess of these limits just by being near a cell phone tower.

When a cellular antenna is mounted on a roof, it is possible that a person on the roof could be exposed to RF levels greater than those typically encountered on the ground. But even then, exposure levels approaching or exceeding the FCC safety guidelines are only likely to be found very close to and directly in front of the antennas. If this is the case, access to these areas should be limited.

The level of RF energy inside buildings where a base station is mounted is typically much lower than the level outside,

depending on the construction materials of the building. Wood or cement block reduces the exposure level of RF radiation by a factor of about 10. The energy level *behind* an antenna is hundreds to thousands of times lower than in front. Therefore, if an antenna is mounted on the side of a building, the exposure level in the room directly behind the wall is typically well below the recommended exposure limits.

Do cellular phone towers cause cancer?

Some people have expressed concern that living, working, or going to school near a cell phone tower might increase the risk of cancer or other health problems. At this time, there is very little evidence to support this idea. In theory, there are some important points that would argue against cellular phone towers being able to cause cancer.

First, the energy level of radiofrequency (RF) waves is relatively low, especially when compared with the types of radiation that are known to increase cancer risk, such as gamma rays, x-rays, and ultraviolet (UV) light. The energy of RF waves given off by cell phone towers is not enough to break chemical bonds in DNA molecules, which is how these stronger forms of radiation may lead to cancer.

A second issue has to do with wavelength. RF waves have long wavelengths, which can only be concentrated to about an inch or two in size. This makes it unlikely that the energy from RF waves could be concentrated enough to affect individual cells in the body.

Third, even if RF waves were somehow able to affect cells in the body at higher doses, the level of RF waves present at ground level is very low – well below the recommended limits. Levels of energy from RF waves near cell phone towers are not significantly different from the background levels of RF radiation in urban areas from other sources, such as radio and television broadcast stations.

For these reasons, most scientists agree that cell phone antennas or towers are unlikely to cause cancer.

Studies in people

Very few human studies have focused specifically on cellular phone towers and cancer risk.

In one large study, British researchers compared a group of more than 1,000 families of young children with cancer against a similar group of families of children without cancer. They found no link between a mother's exposure to the towers during pregnancy (based on the distance from the home to the nearest tower and on the amount of energy given off by nearby towers) and the risk of early childhood cancer.

In another study, researchers compared a group of more than 2,600 children with cancer to a group of similar children without cancer. They found that those who lived in a town that could have exposed them to higher than average RF radiation from cellular phone towers in the previous 5 years had a slightly higher risk of cancer, although not of any certain type of cancer (like leukemia or brain tumors). This study estimated the children's possible exposure based on the number of towers in their town and how strong the signals were from the towers. It did not look at actual exposure of any individual child based on how far their home or school was from a tower. This limitation reduces confidence in the results of the study.

One study looked for signs of DNA and cell damage in blood cells as a possible indicator of cancer-causing potential. They found that the damage was no worse in people who lived near a cell phone tower as compared with those didn't.

The amount of exposure from living near a cell phone tower is typically many times lower than the exposure from using a cell phone. About 30 studies have looked at possible links between cell phone use and tumors in people. Most studies to date have not found a link between cell phone use and the development of tumors, although these studies have had some important limitations. This is an area of active research. For more information, see the document, ***Cellular Phones***.

Studies done in the lab

Laboratory studies have looked at whether the types of RF waves used in cell phone communication can cause DNA damage. Most of these studies have supported the idea that the RF waves given off by cell phones and towers don't have enough energy to damage DNA directly.

Some scientists have reported that the RF waves may produce other effects in human cells (in lab dishes) that might possibly help tumors grow. However, these studies have not been verified, and these effects weren't seen in a study that

looked at the blood cells from people living near a cellular phone tower.

Several studies in rats and mice have looked at whether RF energy might promote the development of tumors caused by other known carcinogens (cancer-causing agents). These studies did not find evidence of tumor promotion. Research in this area continues.

What expert agencies say

About cell phone towers

The 3 expert agencies that usually classify cancer-causing exposures (carcinogens) – the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), and the US Environmental Protection Agency (EPA) – have not classified cell phone towers as to their cancer-causing potential.

The **US Federal Communications Commission** (FCC) has said this about cell phone towers near homes or schools:

"Radiofrequency emissions from antennas used for cellular and PCS [personal communications service] transmissions result in exposure levels on the ground that are typically thousands of times below safety limits. These safety limits were adopted by the FCC based on the recommendations of expert organizations and endorsed by agencies of the Federal Government responsible for health and safety. Therefore, there is no reason to believe that such towers could constitute a potential health hazard to nearby residents or students."

About RF radiation

Some of the agencies that classify cancer-causing exposures have, however, made statements about radiofrequency radiation.

The **International Agency for Research on Cancer (IARC)** has classified RF fields as "possibly carcinogenic to humans," based on limited evidence of a possible increase in risk for brain tumors among cell phone users, and inadequate evidence for other types of cancer. (For more information on the IARC classification system, see our document, ***Known and Probable Human Carcinogens.)*** IARC also noted that exposure to the brain from RF fields from cell phone base stations (mounted on roofs or towers) is less than 1/100th the exposure to the brain from mobile devices such as cell phones.

The **Environmental Protection Agency** (EPA) states:

"At very high levels, RF energy is dangerous. It can heat the body's tissues rapidly. However, such high levels are found only near certain equipment, such as powerful long-distance transmitters. Cellphones and wireless networks produce RF, but not at levels that cause significant heating. In addition, RF energy decreases quickly over distance. At ground level, exposure to RF from sources like cellphone towers is usually very low.

Some people are concerned about potential health effects, especially on the developing brains and bodies of children. Some studies suggest that heavy long-term use of cellphones could have health effects. Other studies don't find any health effects from cellphone use. Long-term studies on animals exposed to the RF found in wireless networks (Wi-Fi) have, so far, found no health effects. Scientists continue to study the effects of long-term exposure to low levels of RF."

Can I limit my exposure?

Cell phone towers are not known to cause any health effects. But if you are concerned about possible exposure from a cell phone tower near your home or office, you can ask a government agency or private firm to measure the RF field strength near the tower (where a person could be exposed) to ensure that it is within the acceptable range.

What should I do if I've been exposed to cellular phone towers?

There is no test to measure whether you have been exposed to RF radiation from cellular phone towers. But as noted above, most researchers and regulatory authorities do not believe that cell phone towers pose health risks under ordinary conditions. If you have additional health concerns, you might want to talk with your doctor.

Additional resources

More information from your American Cancer Society

The following related information may also be helpful to you. These materials may be viewed on our Web site or ordered from our toll-free number, at 1-800-227-2345.

Cellular Phones

Does This Cause Cancer?

Known and Probable Human Carcinogens

Microwaves, Radio Waves, and Other Types of Radiofrequency Radiation

National organizations and Web sites*

In addition to the American Cancer Society, other sources of information and support include:

Environmental Protection Agency
Home page: **www.epa.gov**
Understanding radiation: **www.epa.gov/radiation/understanding-radiation-overview.html**

Federal Communications Commission
RF Safety Program, Office of Engineering and Technology
Web site: **www.fcc.gov/oet/rfsafety**

Food and Drug Administration
Home page: **www.fda.gov**
Radiation-emitting products: Cell phones: **www.fda.gov/Radiation-EmittingProducts/RadiationEmittingProductsandProcedures/HomeBusinessandEntertainment/CellPhones/default.htm**

National Cancer Institute
Toll-free number: 1-800-422-6237 (1-800-4-CANCER)
Home page: **www.cancer.gov**
Cellular telephone use and cancer risk: **www.cancer.gov/cancertopics/factsheet/Risk/cellphones**

National Institute of Environmental Health Sciences
Home page: **www.niehs.nih.gov**
Electric and magnetic fields: **www.niehs.nih.gov/health/topics/agents/emf/index.cfm**

World Health Organization
Electromagnetic fields and public health: base stations and wireless technologies
Web site: **www.who.int/mediacentre/factsheets/fs304/en/index.html**

** Inclusion on this list does not imply endorsement by the American Cancer Society*

No matter who you are, we can help. Contact us anytime, day or night, for information and support. Call us at 1-800-227-2345 or visit **www.cancer.org**.

References

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Baan R, Grosse Y, Lauby-Secretan B, El Ghissassi F, Bouvard V, Benbrahim-Tallaa L, Guha N, Islami F, Galichet L, Straif K; WHO International Agency for Research on Cancer Monograph Working Group. Carcinogenicity of radiofrequency electromagnetic fields. *Lancet Oncol.* 2011 Jul;12(7):624-626.

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Li CY, Liu CC, Chang YH, Chou LP, Ko MC. A population-based case-control study of radiofrequency exposure in relation to childhood neoplasm. *Sci Total Environ*. 2012 Oct 1;435-436:472-478.

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Röösli M, Frei P, Mohler E, Hug K. Systematic review on the health effects of exposure to radiofrequency electromagnetic fields from mobile phone base stations. *Bull World Health Organ*. 2010 Dec 1;88(12):887-896F.

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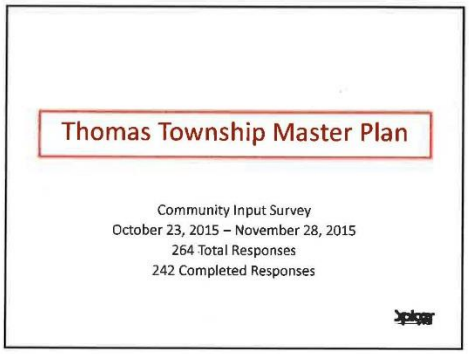
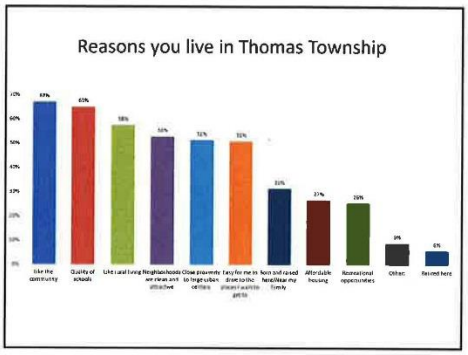
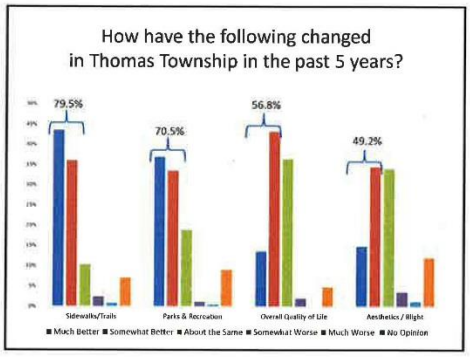
Last Medical Review: 12/02/2014
Last Revised: 12/02/2014

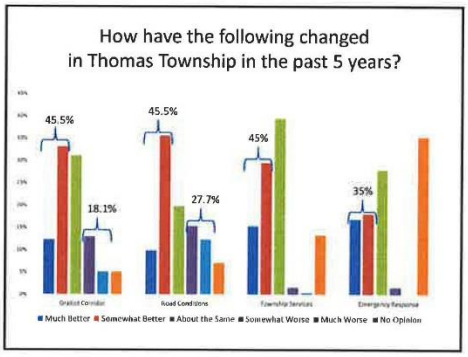
Insert #2

12/17/2015









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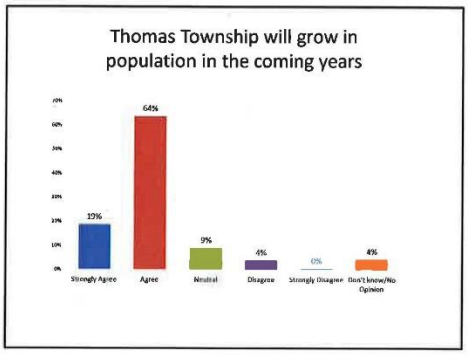
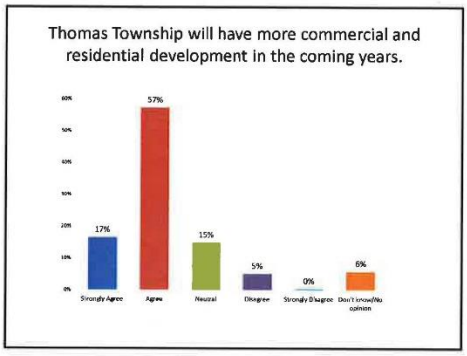
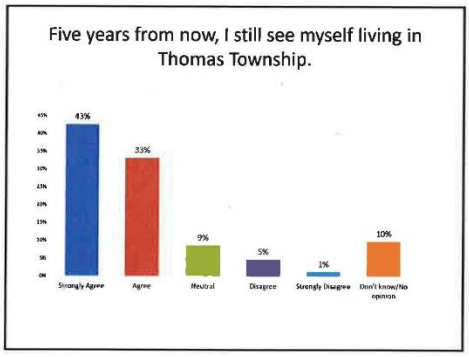
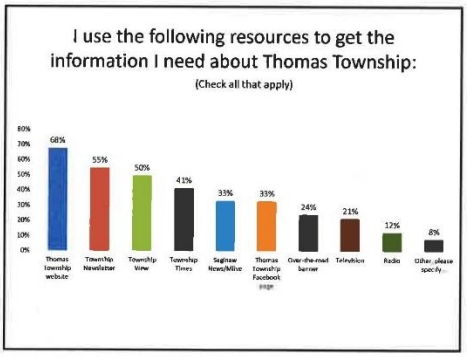
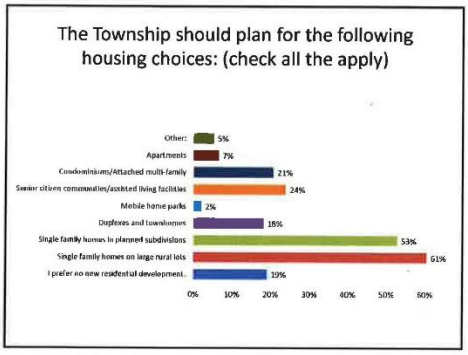
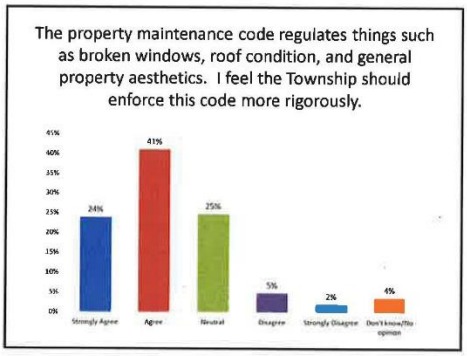

Thomas Township will grow in population in the coming years
19%
64%
9%
4%
0%
4%
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree
Don't know/No Opinion

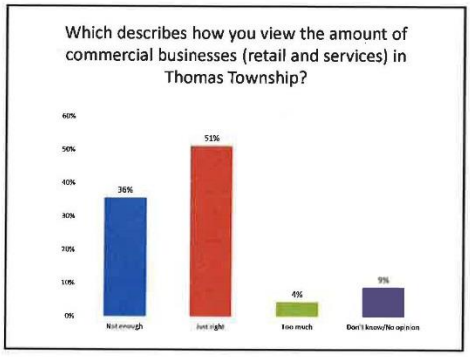

Thomas Township will have more commercial and residential development in the coming years.
17%
57%
15%
5%
0%
6%
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree
Don't know/No opinion

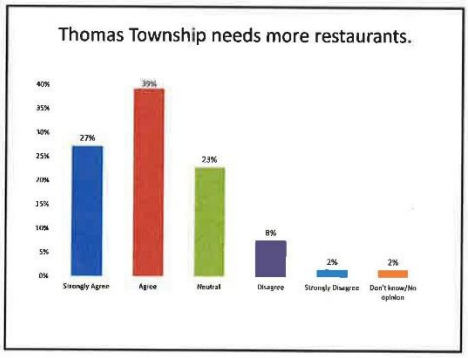

Five years from now, I still see myself living in Thomas Township.
43%
33%
9%
5%
1%
10%
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree
Don't know/No opinion


I use the following resources to get the information I need about Thomas Township:
(Check all that apply)
68%
55%
50%
41%
33%
33%
24%
21%
12%
8%
Thomas township website
Township View
Township Times
Over-the-road banner
Television
Radio

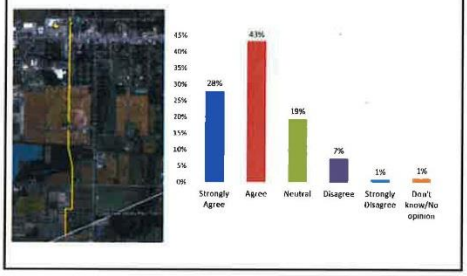

The Township should plan for the following housing choices: (check all the apply)
Other: 5%
Apartments 7%
Condominiums/Attached multi-family 21%
Senior citizen communities/assisted living facilities 24%
Mobile home parks 2%
Duplexes and townhomes 18%
Single family homes in planned subdivisions 53%
Single family homes on large rural lots 61%
I prefer no new residential development. 19%
0% 10% 20% 30% 40% 50% 60%


The property maintenance code regulates things such as broken windows, roof condition, and general property aesthetics. I feel the Township should enforce this code more rigorously.
24%
41%
25%
5%
2%
4%
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree
Don't know/No opinion

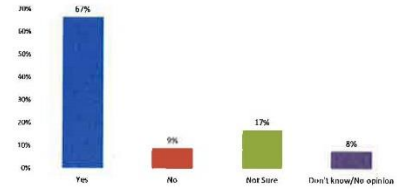

Which describes how you view the amount of commercial businesses (retail and services) in Thomas Township?
36%
51%
4%
9%
Not enough
Just right
Too much
Don't know/No opinion


Thomas Township needs more restaurants.
27%
39%
23%
8%
2%
2%
Strongly Agree
Agree
Neutral
Disagree
Strongly Disagree
Don't know/No opinion

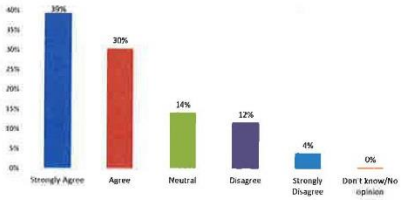
I feel it is important that the Township continues to construct more trails like the Thomas Township Trail



The Township has developed conceptual plans to extend the Thomas Township Trail north to Geddes Road and west along Geddes where it would ultimately travel through Richland and Ingersoll Townships to connect to Midland. Do you support this extension of the Thomas Township Trail over the next 20 - 30 years?

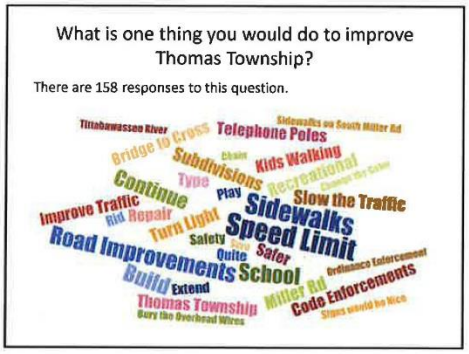


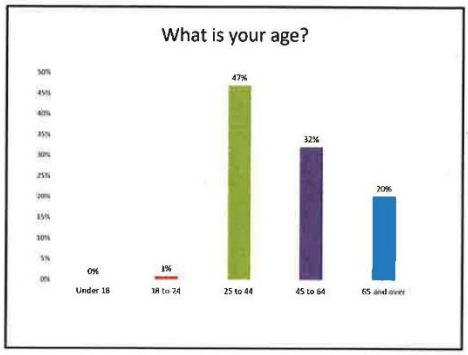
Thomas Township installs new sidewalks according to the master plan map. I feel sidewalks are an important community asset that should be installed along all streets in our community.



What do you like best about Thomas Township?

There are 152 responses to this question.


What is one thing you would do to improve Thomas Township?
There are 158 responses to this question.
Telephone Poles
Kids Walking
Subdivisions
Recreational
Continue
Play
Slow the Traffic
Improve Traffic
Rid
Repair
Turn Light
Sidewalks
Speed Limit
Safety
Quite
Safer
Road Improvements
School
Ordinance Enforcement
Build
Extend
Miller Rd
Code Enforcements
Thomas Township


What is your age?
0%
Under 18
1%
18 to 24
47%
25 to 44
32%
45 to 64
20%
65 and over