Registered Voter Survey Analysis for Ross Township

Survey Date	July 5, 2018 – July 15, 2018
Report Date	August 10, 2018
Notification Methods	Letter on township letterhead sent to all registered voters of Ross
	Township (4,154)
Survey Type	Online, mobile friendly, open access with IP audits
Question Formats	Forced choice; Open ended limited character follow-up (4); Open ended
	general comments (1)
Total Number of Questions	Nine questions with an additional general comment section
Expected Response Rate	20 – 25 %
Actual Responses	1,132 less 269 invalid submissions, 863 valid submissions
Response Rate	21%
Report Format	Standard count and percentage reporting by question; mean, standard
	deviation (if applicable), comments with analysis
Key Factors (Comparative Analysis)	Augusta, Percentage and Count Analysis, No Inferential Statistics
Security Review and Analysis	Yes
Satisfaction Analysis	No
General Comment Analysis	Yes; Ethnographic analysis provided
External Comparisons	Some demographic factors compared to last census data
Limitations	Assumptions are made that the survey respondents are providing an
	honest opinion in regard to their survey responses. Although the survey
	sample was sufficient, people taking surveys often have stronger
	opinions about the topics and could therefore bias the results. A valid
	question to ask is whether the survey results actually represent the
	majority of township voters who did not complete the survey.

Security Analysis and Review

All forms of surveying have advantages and disadvantages in reference to the survey process, collection of data, analysis, and data security and validity. Listed below are some of the key factors:

Open Online Surveying

Simpler process to implement

Does not require the use of a code or link

Usually are anonymous unless the respondent indicates personal information

More difficult to control access to and restrict access to the survey

The possibility of survey fraud is higher if not mitigated through other procedures

Focusing more on the comments rather than the percentages is useful when potential fraud is likely to have occurred

Closed Online Surveying

Requires a unique code or link to access the online survey
Higher data security is provided since most codes or links can only be used once
Works best using email generated codes and links
Code generation for a large paper mailing is often cumbersome; requires more attention and confidentiality
Survey takers have a higher level of concern for anonymity; concerns about matching the code to responses
Often there are issues with lost codes or links with larger public surveys

For the Ross Township survey, the following procedures were conducted to ensure a more valid survey database:

- 1. After the survey was closed, the database was sorted by IP addresses. Each IP address was limited to two submissions. Submissions that exceeded two were deleted. The first two submissions were retained.
- 2. After multiple submissions were eliminated from the database, a random sample of the IP addresses were examined and entered into a database to determine the locality they originated from. If an IP address was discovered from outside the local area (Augusta, Battle Creek, Galesburg, Hickory Corners, Kalamazoo, Richland), it was deleted from the survey database. However, if the IP address originated from a cell phone, two submissions were permitted to remain in the database, unless the cell phone originated from out of state.

- 3. Since there is a pattern to IP addresses from a geographic region, the entire database was reviewed a third time to ensure that only local IP addresses were included, subject to the first two previous steps and exceptions. This entire process (steps 1 to 3) resulted in a reduction in survey respondents from an initial 1,132 to 863 valid respondents. In summary, here are the reductions and rationale:
 - We had 47 responses that were eliminated because they were sent from an out of state location. Some of those locations were Illinois, Ohio, Kansas, Texas, and California. We had a submission from Norfolk, Virginia which was accepted since it was from the Naval Base there. We also had two submissions from Germany that were rejected.
 - We had 10 in-state submissions from Drummond Island which were rejected, along with 8 submissions from the Detroit area that were rejected because they were sent from a land-based Internet provider.
 - The remaining rejections (204) were all locally based. Additional research was conducted on these and it was discovered that most of them (165) were from a local Internet provider (TDS) and service was provided through their Augusta node. The remaining submissions were scattered around the township using TDS and other providers like Comcast.

The final database is quite clean after this process. However, the following items need to be observed:

- 1. It is likely a few legitimate survey responses were accidently deleted from the database.
- 2. It is possible a few invalid survey responses remain in the database.
- 3. Due to external influences by a special interest group (or groups), many people could have been influenced by a mailer which was focused on opposing Commercial Medical Marijuana Facilities (CMMF). The flyer contained many statements and most of the statements were not supported by any factual information or resources.
- 4. There were postings on Facebook in at least one of the CMMF opposition groups that was instructing group members on how to take this survey multiple times and to challenge the credibility of this survey. It was very disappointing that a few people clearly were not operating in the best interests of all township residents and were engaged in this type of activity. It undoubtedly influenced the survey responses received. As a result, it really did not matter if the survey was open or closed access. It was very disappointing to find people in our own community behaving in this manner.
- 5. For questions 1 and 4, and also in the general comments section, please read all of the comments carefully. Although there are definitely some inappropriate comments, people that take the time to leave comments are more engaged in the survey and are trying to express their ideas and concerns.
- 6. This survey was not a random sample of the population. All registered voters were given an opportunity to participate. Therefore, a valid question to ask is why did almost 80% of the registered voters not participate? It is not unusual to see lower response rates associated with surveys in general.

Recommendations

- 1. Although the percentage values for each question are easy to interpret, make sure that the written comments are carefully reviewed. It is evident that many township residents do not understand the zoning process, differences in zoning areas, and the implications associated with zoning in general. However, since it was apparent that many survey respondents were provided with suggested ideas and comments from a special interest group, many of the comments may not reflect the general public opinion.
- 2. Communication may be an issue within the community as it relates to Township Board activity and the various commissions and committees. The township newsletter should be produced on a more regular basis and to reduce costs every attempt should be made to gather email addresses from township residents to reduce printing and mailing costs. Continue placing notices on the web site along with meeting minutes and agendas.
- 3. Consider using MSU, the State of Michigan, and other research institutions to assist with providing the community with more information about topics like solar farms, wind generation, commercial medical marijuana facilities, and any other future development opportunity. Even if the township board decides not to pursue any of these options, a better-informed public is a community asset. Lack of verifiable information and potentially false claims about topics like CMMFs or solar farms does not help the community adequately assess the benefits and risks associated with potential local development.
- 4. Consider surveying the residents again in the future and develop a committee to design and implement the survey and tabulate the results. Again, an opposition group will likely object to some of the survey content, format, questions, and security, whether it is an open format or code accessed survey. Remember to focus on your audience and keep the survey questions as short and clear as possible. Based upon this survey and the 2016 survey, you may want to consider using a rating system for township and county services to assess satisfaction in addition to other topics.
- 5. It is clear from those that did comment on the survey that they desire the township to retain a rural atmosphere especially in the currently zoned rural residential areas. The Board should consider this in regards to any future development and focus more on Agricultural or Industrial zoned areas of the township. However, the general public is unlikely to fully understand what rural residential zoning indicates in terms of development and growth. Again, providing the township residents with more information about zoning is a critical first step in raising the awareness and knowledge about the zoning process.

- 6. Although the survey respondents indicated that they preferred to keep the same level of police coverage, a significant percentage indicated that more coverage was desired. As you review the comments, pay attention to several comments about speeding on local roads and some possible concerns about the response time for the sheriff when an officer is not on duty in the township. Sharing police reports with all residents might be helpful as well. The November ballot proposal for recreational marijuana is likely to have an impact on the need for future police coverage.
- 7. There was a valid concern that an online survey would not engage the senior population. However, the results indicated that the older age groups were well represented in the survey. Although Internet access within the township remains a concern, the option of taking the survey at the Augusta McKay Library, or at the Township Hall, can alleviate many concerns about access.
- 8. It would be helpful to make the township budget more transparent on the website for public review. Many township residents do not understand the size and scope of the township budget and how priorities are determined. A breakdown of how taxes are allocated to the township, county, and state would be helpful as well.

General Analysis by Question

Question 1	In many states and local communities, solar farms are becoming popular. A solar farm is a field of solar panels that use the sun's energy to produce electricity. These solar panels could be located on existing acreage in our Agricultural or Industrial zoned areas of the township. The energy generated is often used locally or sold back to the local electrical power provider by the farm owner. Are you in support of having solar farms in our community?					
Question Type	Yes/No.					
Data Analysis	Category Yes No Total Skipped Question	Count 496 342 838 25	Percent 59.19% 40.81% 100.00%	Note: Percentage values are rounded to two decimal places and occasionally may total just above or below 100%. For clarity, the total will always show 100%.		
Graphical Analysis	Q1: Solar Farms					
	600	QI. Joidi i di ilis				
	500	·				
	400					
	300					
	200					
	100					
	0					
	Yes		No			
General Analysis	with this question, you community (both positing there is an interest in h	will find that many ve and negative), aving solar farms,	 people do not fully how they are constr more information a 	arms. As you review the comments associated understand the impact of solar farms to a ructed, and where they would be located. If bout the benefits and costs are needed by the s where they would be authorized.		

Question 2	police visibility and cove and alternatives were e interested in obtaining i	erage in our commu valuated for police more police visibility	inity. A Police Co coverage. The To	any people living in the township wanted more mmittee was formed by the Township Board ownship Board would like to know if you are still	
Question Type	Increase/Keep the Sam	ne/Decrease.			
Data Analysis	Category Increase Keep the Same Decrease	<u>Count</u> 291 513 43	Percent 34.36% 60.56% 05.08%		
	Total Skipped Question	847 16	100.00%		
Graphical Analysis	Q2: Police Protection				
	600	e e	÷		
	500				
	400				
	300				
	200				
	100				
	0 Increase	Keep the Same	Decrease		
General Analysis	owners. The use of the other factors. At a minimum there are a significant reconsidered in future placements.	e voter registration of imum, there is an in number of people th anning. During the meeting about issue	database could ha terest in at least k at would prefer ar time period of this as associated with	provided in the 2016 survey of property two caused this difference, as well as many teeping the same level of coverage although increase in coverage which should be survey, the Kalamazoo County Sheriff recreational marijuana, its use, and a ballot act on the results of this survey question.	

Question 3	cancer, HIV, and any co conducted on other pos these conditions?	ondition where str	rong pain killers are o	to help them with a medical condition like often prescribed. Further research is being allowed to use Medical Marijuana for
Question Type	Yes/No.			
Data Analysis	Category Yes No	<u>Count</u> 658 175 833	Percent 78.99% 21.01% 100.00%	
	Skipped Question	30		
Graphical Analysis	700 600 500 400 300 200 100 0 Yes	ledical Marijuan	No	
General Analysis	specific health condition medical marijuana for a considerable public disc November ballot. Seve	ns. During the tind idditional uses who cussion about a baral comments we say, the two mariju	ne period the survey nich may have impac pallot measure related ere made about feder ana questions would	t they support the use of medical marijuana for was open, the State of Michigan authorized sted the survey results. Also, there was do to recreational use of marijuana being on the ral vs. state laws. The in separate locations and farther apart. It uestions being close to each other, and also

from concerns as to why this question was asked. In addition, it appears a group of survey responders were "coached" about what to say in response to this question. The survey results indicate that this question had a minimal or no effect on the next question related to CMMFs.

The rationale for asking this question was simple. Are the township residents generally against the use of marijuana for medical purposes? If people object to the overall use of marijuana, then it is likely that they would also oppose the growing and production of it. The survey results indicated that a majority of residents are not opposed to its use for medical purposes, although many valid concerns are expressed related to its continual use and access to the product, as well as the growing and production.

Question 4	Are you in favor of Ross Township permitting commercial medical marijuana facilities in Agricultural or Industrial zoned areas of the township?					
Question Type	Yes/No.					
Data Analysis	<u>Category</u> Yes No	Count 220 637	Percent 25.67% 74.33%	Note: Of all the questions asked, this question was skipped the least.		
	Total Skipped Question	857 6	100.00%			
Graphical Analysis	lysis Q4: Commercial Medical Marijuana Facilities					
	700					
	600					
	400					
	300					
	100					
	Yes	·	No			
General Analysis	there are several exteri	nal events that ne oppose these fac	ed to be evaluated	nmercial medical marijuana facilities. However, as to their impact on this question. Several able discussion occurred on the Internet and on		
	responses, among other residents indicating the	er related issues. ir opposition to th A different group t	Also, an opposition e facilities and maki	to criticizing this survey and submitting multiple group mailed a flyer to most of the township ing several statements that were not supported port these facilities also did a mailing but it		

Similar to "mudslinging" in a political campaign, there is no doubt that these activities had an impact on the survey results. However, some valid concerns were expressed in the written comments about the zoning process, how areas are classified, and a general lack of zoning knowledge by the public. The township may want to consider providing its citizens with more information about zoning classifications, the zoning process, and how zoning impacts current and future development. Also, please review my comments in the security section of this report for additional information about the survey security and audit process.

Question 5	To better understand our community, we would like to ask a few demographic questions. The first is what is your age?				
Question Type	Category choice, 6 categories. Demographic data.				
Data Analysis	Category 18 - 29 30 - 39 40 - 49 50 - 59 60 - 69 70 + Total	Count 52 96 110 192 224 168 842 21	Percent 06.18% 11.40% 13.06% 22.80% 26.60% 19.95%	Note: Demographic data is often used in statistical analysis. In this case it was also used to ensure that the older population participated in the survey, which they did. The distribution of ages compares well to the U.S. Census database for Ross Township.	
Graphical Analysis	Skipped Question 21 Q5: Age Group				
	250				
	200				
	100				
	50				
	0 18 - 29 30 - 39	40 - 49 50 - 59	60 - 69 70+		
General Analysis	The 60 - 69 age group	participated the m	ost in the survey, t	followed by the 50 – 59 and 70 + age groups.	

Question 6	What is your gender?					
Question Type	Category choice, three choices. Demographic Data.					
Data Analysis	Category Female Male Prefer Not To Answer	<u>Count</u> 401 393 51	Percent 47.45% 46.51% 06.04%	Note: Gender based questions are becoming more difficult to ask because some people identify themselves differently. Many surveys now use a category called "other" or will simply use "prefer not to answer", in addition to male and female.		
	Total Skipped Question	845 18	100.00%	answer, in addition to male and temale.		
Graphical Analysis	450 400 350 300 250 200 150 100 50 0	Q6: Gender	Prefer Not To Answer			
General Analysis		onse from older a	age groups, I would h	een female and male. Since the survey had a ave expected a slightly higher percentage		

Question 7	What is your marital status?				
Question Type	Category choice, 4 ca	tegories. Demograph	ic data.		 - ·
Data Analysis	Category Single Married Divorced Widowed	Count 105 652 48 34	Percent 12.52% 77.71% 05.72% 04.05%		
	Total Skipped Question	839 24	100.00%		
Graphical Analysis	700 600 500 400 300 200 100 0 Single	Q7: Marital Status Married Divorced	Widowed		
General Analysis	A significant majority of	of the survey responde	ents indicated the	ey were married.	

Question 8	Do you have any children age 18 and under living at home?					
Question Type	Yes/No. Demographic	Data.				
Data Analysis	Category Yes No Total	<u>Count</u> 210 630 840	Percent 25.00% 75.00%	Note: Since the age groups of the respondents were older, it was expected that a lower percentage of respondents would have children at home.		
	Skipped Question	23				
Graphical Analysis	***					
	Q8: Children 18 and Under Living at Home					
	700					
	600					
	500					
	400					
	300					
	200					
	100					
	0					
	Yes		No			
General Analysis	This demographic gues	tion indicates that	the majority of sur	vey respondents do not have children 18 and		
	under living at home.	and the state of t	and majority of our	12, 12pondonto do nocharo omaton lo una		

Question 9	Are you a resident of th	e Village of Augu	sta?	
Question Type	Yes/No.			
Data Analysis	Category Yes No Total Skipped Question	Count 151 693 844 19	Percent 17.89% 82.11% 100.00%	Note: Some Ross Township residents don't understand that the Village of Augusta is within Ross Township. Also, some residents might have confused an Augusta mailing address with being part of the village.
Graphical Analysis	Q9: Villa	age of Augusta R	esident	
	800			
	700		the things	
	600 -			
	500			
	400			
	300			
	200			
	100			
	0			
	Yes		No	
General Analysis	appeared to be some of Township and that having	onfusion on this on the confusion on this on the confusion of the confusion on the confusion on the confusion of the confusion on the confusion of the confusion of the confusion of the confusion of the confusion on this confusion on the confusion on the confusion on this confusion on the confusion of the confusion on the confusion	puestion as some pour ur mailing address of abase into two sect	vere not part of the Village of Augusta. There eople did not know that the village is within Ross does not mean you are part of the village. This ions: Village of Augusta and Ross Township ferences.

COMPARATIVE ANALYSIS

Ross Township - Ross Township (excluding Village of Augusta) - Village of Augusta

Question	Response	Entire Township	Township (Excluding Augusta)	Village of Augusta
1. Solar	Yes	59.19%	57.80%	68.71% *
	No	40.81%	42.20%	31.29% *
2. Police	Increase	34.36%	33.92%	33.33%
	Same	60.56%	60.79%	62.59%
	Decrease	05.08%	05.29%	04.08%
3. Medical Marijuana	Yes	78.99%	80.42%	73.47% *
	No	21.01%	19.58%	26.53% *
4. Commercial Facilities	Yes	25.67%	25.00%	30.67% *
	No	74.33%	75.00%	69.33% *
5. Age Group	18 - 29	06.18%	05.25%	10.60% *
	30 - 39	11.40%	11.52%	11.26%
	40 - 49	13.06%	11.66%	17.88%
	50 - 59	22.80%	22.16%	25.83%
	60 - 69	26.60%	28.13%	20.53% *
	70+	19.95%	21.28%	13.91% *
6. Gender	Female	47.45%	47.60%	47.68%
	Male	46.51%	46.29%	48.34%
	Prefer Not to Answer	06.04%	06.11%	03.97%
7. Marital Status	Single	12.52%	10.96%	19.87% *
	Married	77.71%	80.99%	62.91% *
	Divorced	05.72%	04.68%	09.93% *
	Widowed	04.05%	03.36%	07.28% *
8. Children 18 and Under	Yes	25.00%	24.89%	24.83%
	No	75.00%	75.11%	75.17%

Comments: Percentages shown in bold with an asterisk are significantly different than the comparative group. In summary, there are some significant differences between the Village of Augusta and the rest of the township. The village has a younger population, a higher percentage of single people, and a higher percentage of people that are divorced or widowed. They appear to be more supportive of solar farms, less supportive of medical marijuana, and more supportive of commercial medical marijuana facilities.

ROSS TOWNSHIP 2018 COMMUNITY SURVEY WRITTEN COMMENTS AND ANALYSIS