2020 MUSKINGUM COUNTY COMPREHENSIVE PLAN

Compiled by: Muskingum County Planning Commission



Communication & Technology Report

Communications and Technology Task Force Report

While Zanesville is the urban center of Muskingum County, we are located in a rural setting compared to most of Ohio. The hills roll, the roads are crooked and the trees are plentiful. These attributes of Muskingum County are among our greatest charms, but they also contribute to our greatest challenges. Infrastructure is slower to develop, negatively affecting the pace of economic development. Utilities, including communications, are hampered by these assets which make Muskingum County a beautiful place to live, visit and enjoy recreation.

In thinking through the changes that have happened since our last Comprehensive Plan, we could not have imagined the impact that social media would play in our daily lives. Indeed, it was not even mentioned in the realm of "communication" in the Executive Summary 11 years ago. Facebook, Twitter, and to a lesser degree Instagram, all play a large and growing role in keeping our communities informed and updated. Each allow for grouping and sub-grouping of information to go to specific individuals whose interests are in common. Now, and in the future, communication en masse for most communities should include broadcast, digital, AND social media sources.

Broadband is the key to the communications future for this plan's timeline. As electricity was a great separator in the early 20th century, access to reliable broadband divides society between those who "have" and those who "have not." Without broadband, we are "choked off" from society, a fact which will increase over time. Muskingum County should recognize and make efforts to keep broadband on the forefront and at the top of development discussions. The most pristine "shovel-ready" site with all utilities has no value without adequate, reliable broadband. Our county does have land; not flat land, but as Eastpointe shows, hills can be moved.

Identifying the issue is easy; accomplishing the task is far more difficult. In the '30s it took an act of Congress and a President faced with the greatest recession our country has ever seen to create the Rural Electrification Act, an effort which was able to electrify rural Muskingum County and our nation. This rural electrification plan is one model to consider "morphing" into a broadband solution. The model has weaknesses today our ancestors did not face: competing interests and rapidly changing technologies.

In recent years, the expansion of broadband slowly continues outward from our urban centers. Varied efforts of primarily private initiatives have moved the needle. In the future, as we "broaden the band" to less densely populated areas, the private market cannot sharpen their pencils enough. Public initiatives should become a significant partner in the expansion. President Kennedy set the course for the 1969 moon landing in 1961 with a common goal led by government and contributed to by hundreds of private initiatives.

The need is great and the capital required is tremendous with current technologies.

Technologies which were once invested in may be obsolete in the near future. This task comes complete with lots of risk. Risk of capital is perhaps the greatest hurdle to date.

The growing trend of Virtual Employment is becoming more and more common, not only in our communities but around the world. This trend allows people to work remotely wherever they like. As the cost of living and real estate continues to grow exponentially, more and more people, especially young families, will look to work virtually and live in communities like ours where the cost of living is much lower, and land is relatively cheap in comparison with the Columbus metro. It is also likely that suburban crawl from the Columbus Metro will become more of a factor for those in the western part of Muskingum County, as people working in the Columbus metro seek a lower cost of living, better schools, and less crime will consider moving to our county. It is our thought that commuting times of less than an hour will make the western part of Muskingum county more attractive to those looking for a better quality of life for their families.

With this in mind, we think that Internet and Telecommunications need to be viewed as a modern utility. Having a robust internet infrastructure is fundamental to compete economically in any capacity. In the future, over the next 10 years, enhancements like 5G will open up competition to those who have sought virtual employment, as well as those living in Muskingum County who commute to Columbus.

Technology Outlook in Muskingum County

Electricity

Muskingum County has an electric backbone, allowing for "virtually" all areas to be electrified. The transmission system in the county is owned by American Electric Power (AEP), www.aepohio.com. The distribution system or those wires which run to residential, commercial and industrial meters, are owned by two entities. AEP is an investor-owned utility serving areas with a denser population, which tends to be urban. Guernsey-Muskingum Electric Cooperative, Inc., www.gmenergy.com, is a rural electric cooperative serving the historically

rural portions of our county. Each utility has its own defined service territory with an "obligation to serve" its area. The territorial lines which were drawn up in the '70s fall to the Public Utilities Commission of Ohio (PUCO).

Extending or increasing capacity of electric lines is typically a reactive venture. The utilities can/will provide the required capacity and voltages as needed by an area, business or development. Electric utilities in Muskingum County cannot refuse service. They can and do expect reasonable cost-sharing, causing some ventures to be cost-prohibitive.

It has been noted that virtually all areas of Muskingum County can be electrified with the present partners. Expansion and increasing capacities take time for design, construction and implementation. As with all utilities, discussions for development are always best served when done early in the process, allowing appropriate time for those reactive utilities to react and best serve Muskingum County.

Automation

Automation has and will continue to have a huge impact on employment locally. It's just that simple. To give perspective, in the Fall of 1974, some 45 years ago, what was then Brockway Glass, now Owens Illinois, had full employment numbers in all of its operations at or close to 2,000 people. Today that same plant is producing similar amounts of glass packaging products, but with employment numbers closer to 375. In the coming 10+ years, manufacturing will continue to automate, but so will other employment categories such as distribution centers, automated transport and trucking, even healthcare. Technology from big data, analytics, and machine learning are driving changes in our lives, making interaction with machines and information more natural and increasingly powerful. It is being called "The 4th Industrial Revolution." While companies are able to count on more precise, higher quality manufactured goods with lowered operational costs, it still reverts back to "the robots are stealing our jobs" reality. It would seem a natural progression here would follow the manufacturing story...that of service-based industry dealing with the contraction of jobs filled by a human workforce. The need for skilled humans will not likely dissipate in sectors of manufacturing and service based industry. It will, however, need constant education and updating of skills. As we try to keep up with Artificial Intelligence (AI), our educators will need to be a central part of the ongoing solution to this challenge/problem/opportunity.

Energy

A few years ago, probably about the time we closed up our last comprehensive plan, the Wall Street Journal had a very interesting piece that highlighted the geographical area of eastern Ohio, the panhandle of West Virginia, and western Pennsylvania. The area, being rich in shale deposits, was of renewed interest to manufacturers because of the likelihood of the abundant and less costly energy source soon to be available to them. It was noted that the same area was an industrial powerhouse in earlier times with steel, glass, and other manufacturing. Fast forward a few years and much of the article's prophecies have come true. A steady source of natural gas has caused manufacturers large and small to once again look at this Tri-State region to place physical plants here. Opportunity from the drilling technology would once again seem to be knocking at our region's door, and indeed even to our doors here in Muskingum county. Our highways have always given us quick access to transportation opportunities, and the proximity of many of the shale drilling operations give us advantages as well. Our Chamber of Commerce and Port Authority Board should continue to play a vital role in enticing manufacturers of all sizes to look at Muskingum County closely when choosing their potential hosting communities. It should also go without saying that our educators can play an incredible role in preparing our workforce for the opportunities that an abundant energy supply can bring.

A communications/technology committee S.W.O.T. Analysis

- S. trengths
- 1. Hills, trees, topography = natural beauty and great recreational value.
- 2. Large numbers of populace engaged in social media groups and sub groups...i.e. Facebook, twitter, Instagram etc..
- 3. "virtual employment" community exponential growth.
- 4. Proximity to Columbus ADI (area of dominant influence) from western Muskingum county.
- 5. Electric backbone allows for "virtually" all area to be electrified.
- 6. Abundance and proximity of energy in the form of natural gas.
- 7. Automation is making existing local manufacturers more competitive and profitable.
- W. eaknesses
- 1. Hills, trees, and topography cause infrastructure to be slower in developing.

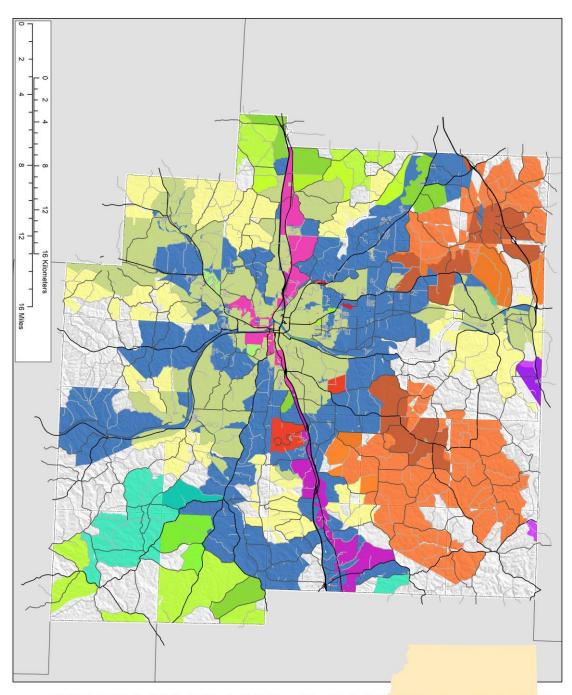
- 2. Broadband access continues to move slowly out of urban centers, slowing pace of economic development.
- 3. Automation can become burdensome and harmful to manufacturing and service employment number.
- 4. Lack of communication and co-operation within Muskingum county leaders. City/county/township/village.

O. pportunities

- 1. Social media enhance our communication options within the framework of existing communications i.e. broadcast, digital/web, cellular, to individuals as well as groups/sub-groups.
- 2. Broadband expansion to all areas of our county will enhance development in the form of employment and housing.
- 3. Energy abundance and our transportation network will enhance our county to manufacturers looking to locate here.
- 4. County work force, if prepared and educated for the tasks required, can usher in the "4th industrial revolution" and AI.
- 5. Virtual employment can bring new thinking and energy into our county as transplanted residents become part of our community's social fabric.
- 6. As the Columbus ADI expands, western Muskingum county property values and opportunities will be enhanced.

T. hreats

- 1. Broadband development lags and in turn causes potential employers and residents to seek other communities to live and do business in.
- 2. Educators fail to prepare local workforce for the future needs of employers.
- 3. Automation evaporates opportunities for employment without enhancing existing employees' lives.



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