Foxconn’s Groundbreaking Move to Mount Pleasant, Wisconsin:

Past Practices, Present Plans and Future Concerns

By

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Abstract

Foxconn Technology Co. Ltd.’s move of its flat panel display (FPD) manufacturing plant to Mount Pleasant, Wisconsin, must be held to a higher standard than its business practices in other countries if it is to be sustainable. Wisconsin’s government incentives offered to Foxconn have raised serious concerns for the citizens of the village in regards to land, water, taxes, and infrastructure. The goal of this study is to examine Foxconn’s business model of past practices in conjunction with the incentive package that it was offered and predict its effects on the surrounding communities, people and their environment.
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Problem Statement

Foxconn Corporation’s 20 million square foot facility creates many benefits and risks for Wisconsin. This will benefit the area as it will bring jobs and opportunity to employees who are looking to become a part of the Foxconn corporation. The risk of this includes increased abuse of the Great Lake water supply and pollution in general. By looking at past practices by Foxconn and current insights on what will occur, I will come up with an informative application on what to expect from Foxconn’s presence to the Wisconsin area.
Literature Review

Introduction/Background

Forming in 2004, Foxconn Technology Co. Ltd. is presently the world’s largest manufacturer of consumer electronics including products used in the assembly of mobile phones, computers, and televisions. Hon Hai Precision Industry holds a large share of Foxconn ("Foxconn Technology Co., Ltd." 2018). Foxconn’s facilities originated in Taiwan and mainland China and have within the last decade branched out to about a dozen countries including Mexico and Russia. The distribution of its products are all across the Americas, Europe and Asia including devices like iPhones and iPads for Apple, personal computers for Dell and game consoles for Microsoft. In 2006, investigative reporting published that Foxconn’s factories in China had employees living in crowded company dormitories and working in harsh conditions for substandard salaries. In a six-month time frame spanning 2009 to 2010, ten Foxconn employees in China committed suicide due to sweatshop factory conditions (Xu and Li 2012).

In July of 2017, Foxconn announced its plans to build a massive electronics manufacturing plant of flat panel displays (FPD) in Mount Pleasant, Wisconsin. This move to the midwestern United States is the first of its kind for Foxconn. According to the Chicago Tribune’s article “The Next Foxconn and Illinois: Here's why Wisconsin will be the state growing more taxpayers” (2017), the state of Wisconsin won the bid through the use of tax incentives, $3
billion in tax benefits over 15 years. Mount Pleasant, Wisconsin is a fitting site for the plant for many reasons. Mount Pleasant is in close proximity to Lake Michigan and is nestled between the major metropolitan areas of Chicago, Illinois, and Milwaukee, Wisconsin, where it will draw diversely, qualified employees. Foxconn’s technology park will be built in a primarily quiet, agricultural region and will require the acquisition of over 70 parcels of private land (Zumbach 2017). Improved road infrastructure in proximity to the technology park as well as the increased demands for public safety, housing, schools and services will need attention (Zumbach 2017). Being the leading producer in liquid crystal display (LCD) panels comes with some environmental concerns considering that over 33 million people live in the Great Lakes watershed. Foxconn boasts job creation, but the company may have to look extensively outside of Racine County that reports a low unemployment rate of 4.7 percent as of August 2017 (Zumbach 2017). This project will explore the benefits, drawbacks and concerns for Foxconn, the state of Wisconsin, its citizens, and the area’s natural resources.

**Foxconn’s Past Practices**

In the 1970s, United States manufacturing started migrating overseas due to lower labor costs. Overpopulated cities coupled with little to no organized labor unions opened the door for fewer regulations and the unethical treatment of employees. In 2006, a report of Foxconn’s subpar treatment of employees was made public. In order to get away from this controversy and make their employees still motivated to work, Foxconn issued a pay raise that would double the workers’ income. American companies that use Foxconn as part of their supply chain like Apple, Dell, and Hewlett-Packard, for fear of customer repercussions, perhaps took a closer examination
of the crisis due to the United States labor laws. As a result, Foxconn instituted a fostering of
goodwill with its employees. Chinese employees at some of the Foxconn locations would only
be making $2.50 an hour. These low costs followed along with poor working conditions that led
to many suicides at Foxconn facilities was bringing up red flags. The pressure from the Chinese
government, public, and media to fix this problem was a major reason why Foxconn started to
fix certain ways they went about things within their company. Articles would be published to the
public displaying how low working costs and suicides were going on within Foxconn and how
the government was starting to feel as if they needed to step in (Clarke and Boersma 2015).

Foxconn factory locations in China had twelve suicides in the first five months of 2010. Most of these suicides were blamed on poor communication strategies between stakeholders. Foxconn would not admit that the suicides were caused by them, but because of an imbalanced stakeholder relationship that led employees to believe that they were not important stakeholders. Foxconn was considered to have intentionally placed their stakeholders at risk, which includes violating laws and regulations or not doing enough to prevent accidents. Foxconn attempted to convince the public that the crisis was accidental and that it was uncontrollable by the country. In response to attempting to try and resolve this problem, Foxconn invited some monks to the Foxconn campuses to demonstrate a religious ceremony to dispel misfortune rather than looking deeper in to problems that may be within their management. Foxconn truly believed that these suicides were caused by the victims themselves and not by the company. Because Foxconn kept down playing the suicides and giving a “no response” answer, this only put a more negative effect on their reputation as a responsible company (Xu and Li 2012).

It was announced on the steps of the White House in August of 2017 by
President Donald Trump and Foxconn’s founder and chairman, Terry Gou, that a new manufacturing facility would be built in Wisconsin. Ingleson (2017) comments that while United States workers will gain skilled, manufacturing jobs, Foxconn will have the opportunity to redeem its reputation for its dubious labor practices.

Wisconsin’s Incentives to Foxconn

Wisconsin legislators offered Foxconn one of the largest incentive packages in United States’ history providing $3 billion in tax breaks and concessions in environmental regulations that would require Foxconn to spend more money on pollution-control equipment. Zumbach (2017) concludes that Foxconn “must employ at least 260 workers by 2018 and 3,640 by 2021, 7,800 by 2024 and 10,400 by 2027 to get any job-related tax incentives. It would need to eventually hit 13,000 to earn the maximum payout. Foxconn would need to pay those workers at least $30,000 annually, with an average salary of at least $53,875 — slightly below the county’s median household income, $55,584, according to the most recent U.S. Census Bureau data.” To keep its side of the incentive bargain, Foxconn will need to analyze the average wages being paid to employees in the surrounding areas of Mount Pleasant in order to be competitive and maintain a workforce within its campus given Foxconn’s track record of paying lower wages to its foreign workers.

The Milwaukee Journal Sentinel reported in 2007 that the state of Wisconsin reviewed 25 companies that were given the largest subsidies, and only two of them reported their job creation and retention efforts to government officials overseeing incentive bargaining (discussed in
Upon further investigation, when gaps were evident, the state decreased the quota for job creation instead of canceling the subsidies or requiring payment. In a more recent review of companies in 2012, $12.2 million in low-interest loan repayments was owed to the State. Wisconsin should hold Foxconn accountable for its end of the incentive bargain and not continue past practices of forgiving quotas or tax debt.

**Job Creation**

Wisconsin Governor Scott Walker in his State of the State address in 2011 announced that “every act of our administration should be looked at through the lens of job creation...people are freed from government mandates, rules, regulations and taxes; freed to create jobs, to grow their businesses, to live their lives” (McCarthy 2015). True to his word, Walker followed through with the incentive offer to Foxconn. Ingleson (2017) notes that growing automation technological advancements are whittling away at the manufacturing jobs, and although Gou is opening manufacturing factories, his future plans include replacing workers with “Foxbots.” Automation reduces the risk of human error and saves companies’ capital they would spend on salaries and healthcare, but if job creation and retention is part of an incentive plan, the business plan should include a future for human workers. Ingleson (2017) believes the Foxconn deal does not address what is on the minds of the future employees - affordable health care, a living wage, and less of a dwindling workforce.

Racine County’s low unemployment rate of 4.7 percent combined with the “Help Wanted” signs in neighboring warehouses like Amazon and Uline may force Foxconn to draw employees from the metropolitan areas of Chicago and Milwaukee. Zumbach (2017) reports that Kenosha’s Gateway Technical College is expanding its curriculum with robotics and
mechatronics courses in an attempt to keep up with the demands of the local employment opportunities. Furthermore, experts in economic development are hoping that Foxconn will draw in job seekers that would consider relocating to the Mount Pleasant area.

**Economic Development**

Economic development incentives are at the top of the list of many local governments even though there is a lack of scholarly consensus on the topic. More often than not, local governments need to carefully weigh where scarce resources will be spent when it comes to attracting a million dollar plant (MDP). Many times education and social services are put on the back burner to make way for new businesses that promote job creation and economic stimulus. Patrick (2016) warns that county that gets a winning bid of a MDP is not always economic development’s “magic bullet.”

Wisconsin legislators tout that Foxconn will bring economic development to an otherwise agricultural landscape although Adkisson (2016) reports that there is a correlation between industries and social conditions in a geographical concentrated population lending itself to high-tech firm survival, there is less of a connection to an economic development policy.

**Infrastructure Improvement & Land Acquisition**

The proposed 2,900-acre Foxconn facility will need significant infrastructure upgrades including widening service roads and highways. The Wisconsin Department of Transportation plans on widening I-94 by adding four lanes in total, two lanes on southbound side and two on northbound side. Frontage roads will be reconstructed and widened with multi-divided urban
roadways. This project is going to cover a 35-mile reconstruction area in three different segments. There will be seven interchange reconstructions to ease the traffic on and off of I-94. These reconstructions will make travel time shorter for commuters coming from the Milwaukee and Chicago areas. Commuters may be the main beneficiaries from this, but nearby contractors and their employees will also benefit from this expansive $6 million project. There is also construction on a water main along County Highway H. This will improve water flow and confidence in reliable underground water structures durability (“Foxconn” Village of Mount Pleasant Wisconsin 2018).

Acquiring the land for the facility has become a debate for some of the private citizens in close proximity to the new site. A great deal of the acreage is farmland. A majority of the landowners have sold their property, but a few others remain convinced that their land is worth more than what is being offered to them. The local community development authority may use eminent domain power to seize the land. The Fifth Amendment protects private property to the extent that if land is needed for public use, the owner must be given just compensation. Lookman (2015) points out that Supreme Court decisions regarding eminent domain have been inconsistent and landowners are seeking legal representation to protect their properties. The Supreme Court defines just compensation as fair market value, what one is willing to pay when one is willing to sell, but the residents surrounding the Foxconn site, are not willing to sell for the offered price; therefore, the community development authority and the residents that are holding out are ensued in a legal battle (Romell 2018). Investors that have been looking at properties surrounding Foxconn’s Mount Pleasant site have noted that neighboring land prices have already doubled or tripled since the announcement of the project (Zumbach 2017). Residents that have
refused to sell their land may have anticipated that their property is worth more due to the development in the area.

**Environmental Concerns**

According to the Environmental Protection Agency, 362 contaminants have been identified in the Great Lakes system, only about a third of which have been evaluated for their effects on wildlife and human health. The International Joint Commission, an organization that was formed by the Boundary Waters Treaty of 1909 to prevent and mediate boundary water disputes between Canada and the United States, identified eleven of these as “critical pollutants” that required immediate attention. Mercury and lead are two that are on that list (Fields 2005). When LCDs are produced, there is a large amount of harmful substances that are exposed to the environment including mercury and lead (Liu 2016). Toxic metals, flame-retardants and many more pollutants are present in e-waste and are released into the environment from e-waste. Around 50% of LCD screen production is disposed of right away because it fails to meet certain standards. This e-waste disposal would take place in Wisconsin and would not make instant impacts but would affect later life when looking at the Great Lake.

The main method of e-waste disposal is from landfills and currently there are only about half of the states in the United States that have implemented a ban on e-waste in landfills. Not only does this hurt the environment, but also it can affect workers that handle these e-waste products. The workers that handle the products are rarely issued gloves, goggles, respirators and proper work clothes. There are current efforts going towards protecting the safety of workers that handle the
products, discontinuing the usage of landfills, and making people aware of the growing health issue of e-waste and its effects. Around 71% of e-waste to be disposed in 2012 went to landfills due to low cost rather than recover metal resources in e-waste. The recovery percentage of annual e-waste generated in the United States has been increasing over the years. The federal government Interagency Task Force on Electronics Stewardship (ITFES) has put forth a National Strategy for Electronics Stewardship (NSES) that calls for certain goals in order to have a more efficient way of safely handling and correctly managing e-waste (Seeberger 2016).

Since there is more electronic and electrical equipment (EEE) being produced, there is more pressure on companies who produce these products to make the conscientious environmental decision when it comes to how the products will be disposed or recycled. Townsend (2011) reports there has been a dramatic increase in the use and production of EEE. There is an increasing awareness of the discarding of these products and it’s important for Foxconn to have a proper layout plan on how they will take care of their EEE discards. Once the products are shipped away Foxconn will no longer be expected to take the products back and recycle them. It is expected that any company that purchases their product will oversee disposing of it. Improperly disposing these wastes can be harmful to human and environmental health. It would be in Foxconn’s best interest to keep the area that they will affect under sustainable conditions that agrees with proper regulations and policies put in place by governments, institutions, and product manufacturers. Reinert et al (2002) in The Annals of Regional Science state that the Great Lakes region has seen an increase of industrial pollution due to the increased economic activity. Great Lake states are increasingly at risk given that they account for more than one-third of the United States’ manufacturing output. After assessing the facts, the issue at
hand is how to still capture the economic gains in the Great Lakes without sacrificing the environment. Zumbach (2017) points out that due to the swiftness of the Foxconn deal, government officials have chosen not to require a state-level environmental impact study. The foregoing of this study and the incentive of concessions in environmental regulations have caused concerns among environmentalists.

The Great Lakes region states are careful and cautious about how Lake Michigan water is used. Foxconn is looking for access to millions of gallons of water from the Great Lakes in their manufacturing process. The Great Lakes Compact, an agreement between the region states, will be put to the test as Foxconn challenges the use of water as it lies partially outside the Great Lakes natural basin. Foxconn’s plant will be built on the divide of water that drains into the Great Lakes and the water that drains into the Mississippi River. Foxconn’s water supply will come from the city of Racine, which is within the basin of the Great Lakes. The access to the Great Lakes was one reason why Foxconn picked Wisconsin as its site. Foxconn would return 4.3 million of the 7 million gallons that they would use everyday; the rest would be lost from the evaporation in Foxconn’s cooling system. Foxconn would be one of the largest users taking water outside of the Great Lakes basin. Not only is the water return a big issue, but also Foxconn must make sure they remove all hazardous chemicals that could be within the water from the manufacturing process before it is returned through Racine’s treatment plant back to Lake Michigan (Hawthorne 2018). Being able to look at the 8-hour Ozone averages from the Wisconsin DNR will help determine where there are high levels of certain pollutants and if those values will increase or decrease over time (Air Quality Reports 2018).
Applied Project

This will be an informative report on the movement of Foxconn to Mt. Pleasant showing people what will be happening, what to expect, and how this movement will affect them, so they can prepare. I want my target audience to be anyone that will be affected by this movement of Foxconn, so residents of Racine county and other surrounding counties that will be affected. I want to have a lot of visuals on data about his movement, so people can more easily understand what is going on. The final product will be making a web app that would allow people to easily access and understand environmental, economic, and social changes that will occur.

Methodology

School districts, ground level ozone, transit, employment, and nearby businesses are all aspects of the surrounding community that Foxconn will affect. Maps provide a visual aspect of what to expect from Foxconn’s move to Mount Pleasant. Some maps were created from the Business Analyst extension of ArcMap depicting employment areas, and surrounding businesses that will profit from Foxconn. For other maps data was pulled from various online sources. The first map shows the basic outline of the Foxconn campus along with future expansion and construction, staging, and future development areas (Figure 1). This was made by using polygons to digitize these areas based off what Foxconn projects to build.
The second map outlines a fifteen, thirty, and hour drive times from the Foxconn campus (Figure 2). There are 3 zones on the map with a legend, so the future employees know potential drive times. The map was made by using the business analysis app and selecting the drive time tool and then entering the drive time parameters. This gives future employees, based on where they live, a good idea of how far of a commute to Foxconn.
A third map created with the business analysis app shows a layout of education levels for the three drive time ranges (Figure 3). For the 15-minute drive time range, the education layout shows everyone who has a highest education level of GED. For the 30-minute drive time range the education layout shows everyone how has a highest education level of Bachelor. For the 60-minute drive time range the education layout shows everyone how has a highest education level of Professional. The reason certain education levels are paired with different drive time rings is due to availability. The lower the education level the more likely someone has that and it makes sense to assign the GED education level to 15 minutes because there will be a large
amount of people with that degree so there is no need to look at people who live an hour away. The professional degree level is assigned to the hour drive time ring because the ring contain both milwaukee and chicago and it is more likely that areas near a large city will have people with higher level of degree due to the city's opportunity. The way that these were found was by querying the correct education level for the correct drive time ring and using symbology to show the concentration of people with that educational field. This map is made to give people a good understand where Foxconn will look for its employees and how many people in certain areas have the same educational label.

Figure 3: Professional/Grad Degree on people in 60-minute drive time radius
The fourth map displays gas stations within the drive time rings. This map is made to show the gas stations that will benefit from all the commuters traveling to and from work. This was made by selecting the gas stations from the attribute table and then changing their points to gas station symbols in symbology.

Figure 4: Gas Station layout within a 15-minute drive time radius

Map number 5 shows if there is an increase of children at school which would mean there are an increase of families moving to the area. After finding the information on the school district
website the statistics were moved to excel and then geocoded in ArcMap. The second map shows the student to teacher ratio for every school. I used quantity symbology and used the graduated symbols to easily show which schools had a significantly higher or lower student to teacher ratio.

Figure 5: Location of Racine Schools
The ozone air pollution can be looked by the Wisconsin EPA (Download Daily Data - EPA 2018). Data was taken from the EPA into Microsoft excel. After, looking through the data that was necessary for mapping the daily mean lead levels in the air, this data was then brought in ArcMap to map. After bringing in the World Street Base map and the lead data, both needed to be on the same Geographic coordinate System so the XY points of the lead data could show up for accurate mapping. This data shows the air pollutant (lead) and its current level at certain areas near Foxconn that could be possible locations for e-waste disposal.
Figure 7: Lead air pollution areas with Foxconn Campus
There will need to be a major transit option to get people from Milwaukee and Racine to the Foxconn campus. The fastest route using the Milwaukee County Transit System (MCTS) from Milwaukee to Foxconn is over 2 hours. I used the Find Route tool on ArcMap to map 2 different routes: one from Milwaukee direct to Foxconn (29 miles in 27 minutes) and one from Milwaukee, to Racine, and then to Foxconn (41 miles in 1 hour and 4 minutes). Each stop on the map is located near a parking garage.
Discussion

My overall goal is to make an informative map collection about how Foxconn will change this area. Visuals are important as they will allow the viewers to more easily understand the effects of Foxconn’s presence in Wisconsin. The purpose of these maps are to get some insight of the smaller, but still important issues that need to be addressed and looked at. The use of water is the big issue here, but I focused on more specific problems that may occur. It is important to see if there is an increase of students at nearby schools, because with an increase of
students comes an increase of money that needs to be distributed to the schools. With all the
attention being on this large multi-million dollar company, there must still be a balanced amount
of attention to other community services. There must be a concern to where Foxconn’s e-waste
will be disposed of due to its emission of lead in the air into the ground ozone layer. The
pollution of lead into the ground ozone layer needs to be monitored so it does not cause further
issues. Transportation will be key for getting locals from Milwaukee and Racine to Foxconn in a
fast and efficient way. Offering an improved route of transportation will give people more of an
incentive to take the trip and job. Certainly, none of these problems are an issue as of today, but
there are future issues that may come about with the presence of Foxconn. If I had more time, i
would make a map looking at property values around the Foxconn campus to see if they rise or
drop. I would also want to look at ethnicity levels around the area to see if there is any movement
in ethnicity percentages in this area.
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“The Next Foxconn and Illinois: Here's why Wisconsin will be the state growing more taxpayers”


