

The Adaptive Reuse of Commercial Buildings in Susquehanna Township

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I. Introduction

Throughout Susquehanna Township, the amount of vacated commercial buildings is rising. Unfortunately, the increase in remote working as an unexpected outcome of the coronavirus pandemic has only accelerated this problem. As a result, building obsolescence is consuming the area. Building obsolescence reduces the environmental, economic, and social performance of the building.¹ The building becomes economically unsustainable with minimal occupant satisfaction as well.²

Multiple municipalities similar to Susquehanna have implemented adaptive reuse ordinances in order to solve the problems building obsolescence causes. An ordinance in Whitehall Township was implemented for affordable housing and multifamily housing.³ Additionally, an article focused on adaptive reuse was added to an ordinance in Easton, PA in order to promote the redevelopment and revitalization of underutilized and underperforming areas of the City with mixed residential and commercial uses and industrial development.⁴ The common theme of these ordinances is that they seek to revitalize areas by using buildings for a different purpose that they were intended. They require that within certain areas, adaptive reuse must be used instead of new construction and demolition. The adaptive reuse of these buildings could open up opportunities for families to find new homes if these buildings were restructured or adapted for residential use.⁵ Adaptatively reusing existing commercial buildings will lead to social, environmental and economic impact that would be much greater than if demolition or new

¹ Shahi, S., Esnaashary Esfahani, M., Bachmann, C. and Haas, C., 2020. A definition framework for building adaptation projects. *Sustain Cities Soc.*, [online] 63(102345), p.1. Available at: <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7326450/>>

² Id.

³ *Ordinance No. 3061, Article XVII Adaptive Reuse*. § 27-199.1.

⁴ *Ordinance No. 5701, Article XXI Adaptive Reuse (AR) District* § 595-115: § 595 -121

⁵ Chester County Planning Commission, n.d. *Adaptive Reuse*. Chester County: Chester County Government, p.1.

construction were to take place.⁶ Less buildings will lay dormant polluting the community, businesses will be more willing to open given the reduced costs of reconstruction and people will have more opportunities to live in a safe and affordable home.

Adaptive reuse is the process of repurposing buildings for viable new uses and modern functions, other than those originally intended to address present-day needs.⁷ Many of these buildings have inquisitive architecture, adding character to their neighborhood, therefore they hold substantial value for owners. Property owners are deciding to reuse these buildings for new purposes.⁸ This not only saves money and resources, but it assists in sustainability as well. Many of these buildings are laying dormant in areas of dense population but their reuse makes their surrounding neighborhoods much more valuable and vibrant.

In Section II, we will discuss the major sustainability problems that building obsolescence⁹ creates for townships such as increased energy use, economic unsustainability and social deterioration. Many ordinances that have required an increase in adaptive reuse in their townships have witnessed energy savings because of the action. In the past, it was easier and more affordable to just demolish old buildings or buildings that no longer served a purpose because the process of rebuilding was not expensive.¹⁰ This is because the materials needed to construct these buildings were not as expensive as they are today.¹¹ The increase in value of these

⁶ *Id.*

⁷ *Id.*

⁸ *Id.*

⁹ Baum, A., 1991. *Property Investment Depreciation and Obsolescence*. London: Routledge. Obsolescence is the process of becoming antiquated, old fashioned, outmoded, or out-of-date. It describes a decline in utility that not result directly from physical usage, the action of the elements or the passage of time.

¹⁰ *Chester County Planning Commission, supra* note 5, at 1.

¹¹ *Id.*

materials helps to reduce the need to demolish and propels adaptive reuse as a method that can save substantial energy.

Section III will detail that Susquehanna Township lacks a specific ordinance that seeks to enhance the Townships outdated buildings or buildings not being used. Section IV will analyze how other municipalities approached building obsolescence and vacancy through implementing adaptive reuse ordinances. This section will break down multiple ordinances of similar townships and detail what has worked for these townships and what has not in terms of their impact on sustainability. This information will be necessary to determine how large of an impact reusing commercial buildings in Susquehanna Township can have on the social, economic and environmental statuses. Section V details our proposed ordinance and recommendations for Susquehanna Township. Finally, Part VI concludes the narrative and summarizes all key points.

II. Problems with Building Obsolescence and the Coronavirus Catalyst

The main issue with building obsolescence is that the benefits that the property can bring in for the Township are non-existent, essentially draining the life of the municipality. There is absolutely no sustainability obtained by these buildings lying dormant. They pollute surrounding areas with waste and chemicals. Businesses are no longer in these buildings which means less revenue for the township. This then expands the problem because educated citizens will no longer want to live in a community that is lacking opportunities and neither will prospective businesses.

What made the monuments and buildings of Ancient Rome so attractive to all who traveled there was not just their being and architecture (albeit gorgeous), but the expansive culture, new livelihood and societal leaps being witnessed within these buildings. If none of those magnificent

buildings were taken advantage of and used for a specific purpose, the term “when in Rome” most likely would not exist because that version of Rome would be much different than one we learned about in Renaissance courses. Also, with the addition of coronavirus accelerating the need to reuse commercial buildings, if action is not taken right now then we may see more vacant buildings than ever before.

A. *Environmental Issues*

Underutilized and vacant commercial buildings take an environmental toll in the area that they are located in, typically because of contamination. With coronavirus quickly causing businesses to go completely remote, vacant commercial buildings will begin to consume cities unless something is done.

A surge of building vacancies will eventually create brown sites. Brown sites are abandoned or under-utilized industrial or commercial sites, which may be contaminating the environment.¹² If these sites are not cleaned up and reused, it can open up the owner for liability. Grey sites on the other hand are typically old retail malls that do not attract investors or customers.¹³ They are not necessarily contaminating the environment, but the energy used to create them is wasted.

Vacant properties are associated with environmental risks that can hinder not only the Township but the individuals that make up the Township as well. “Older buildings constructed before 1980 may have existing asbestos insulation and tiles, as well as lead paint and lead piping.”¹⁴ This mineral is a carcinogen and is proven to cause cancer in individuals who

¹² Chester County Planning Commission, n.d. *Brownfield and Greyfield Redevelopment*. Chester County: Chester County Government, p.1.

¹³ *Id.*

¹⁴ Duncan, A., 2020. *Vacant Property’s Environmental Risks | PropertyCasualty360*. [online] PropertyCasualty360. Available at: <<https://www.propertycasualty360.com/2013/11/27/vacant-property-environmental-risks/?slreturn=20200829103919>>

consistently inhale it.¹⁵ Also, leaking oil tanks, pipes and appliances are possibly prevalent on these properties, which can cause extreme environmental damage.¹⁶ Underground storage tanks that are not maintained can contaminate soil and groundwater as a result.¹⁷ Poor maintenance, concrete cracks dilapidated roofing, clogged sewer pipes can result in water intrusion and mold growth in commercial spaces, which will have an effect on individuals who use that space¹⁸. Human beings are not only affected by possible water pollution but plants and animals as well.¹⁹

Not only are their passive problems caused by leaving buildings vacant, but there are also active ones caused by humans as well. These vacant areas are attractive spots for criminals to dump hazardous waste.²⁰ The containers the waste products are usually stored in do not do a decent job of containing the waste, which frequently ends in the release of contaminants onto the property. Criminals find ways to use these areas for drug dens and the remnants contaminate the area after they move on.²¹ It can cost an exorbitant amount of money to then remediate the property to its initial standing.

B. Economic Issues

Building vacancy and obsolescence is detrimental to the economic prosperity of any municipality. They decrease surrounding property values, are extremely expensive to manage or demolish and generally decrease the character value of the area. Building vacancies cost more to deal with for municipalities because the land owner is still in control of the building whereas

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ *Id.*

¹⁸ *Id.*

¹⁹ *Id.*

²⁰ *Id.*

²¹ *Id.*

with abandoned buildings, the government has free reigns.²² The main reason why commercial buildings stay vacant instead of demolished is due to the property owners believing the land will naturally increase in value over time, even though no purpose is being served by the building.²³ That problem will only increase during these coronavirus times with businesses choosing to terminate leases with their landlords after realizing that the work being done does not necessitate an office space. Business owners can save thousands each year by choosing to go fully remote. As a result, landlords will be managing an excess of buildings without any lessees. Thus, they will wait for the natural rise in value that property experiences even though their vacant buildings will depreciate in value because of lack of maintenance and attention. Sociologists believe that community members or outsiders who see vacant buildings with smashed windows or no apparent activity will believe that the Township is not concerned with the health of the community because it is not worried about vacant buildings. Consequently, possible new residents will choose to move somewhere else, business owners and investors will choose to open up businesses somewhere else, and current residents will choose to move somewhere else.

Studies have shown that a physical breakdown in a neighborhoods appearance which is generally beckoned by vacant buildings, is followed by the dispersal of highly educated residents.²⁴ Once this begins, a trickle down effect on the rest of the community will occur because other residents see the residents who most contribute to the well being of the economy leaving the area so they begin to question why they are not doing the same. “If the educated and well paid are leaving, why should I stay?” is a question running through the minds of citizens

²² Kraut, D., 1999. Hanging out the No Vacancy Sign: Eliminating the Blight of Vacant Buildings from Urban Areas. *New York University Law Review*, 74(4), pp.1139-1150.

²³ *Id.*

²⁴ *Id.*

living in communities witnessing a rise in vacant buildings. The Department of Housing and Urban development determined that the tipping point for most neighborhoods is three to six percent vacant buildings. ²⁵This is not a large amount and is evident of the fact that vacancies no matter the distinction of building; commercial, industrial or residential, can create detrimental and sometimes irreversible problems for communities.

C. Social Issues

Substandard living is not ideal for any Township which strives to put their citizens in the best situation possible. The public's health is affected by many factors such as access to healthcare and quality food, but active neighborhoods and buildings benefit the public just as much. The condition of the homes people live in is essential for a good quality of life. Not only can the homes of individuals contribute to their own health problems, but other residential and commercial building vacancies can contribute to health problems as well. Living near abandoned buildings or vacant lots is linked to higher rates of chronic illness, mental health problems and homicide.²⁶ Studies that determined these links "focused on the impact of deleterious housing and neighborhood conditions on particular health outcomes."²⁷ This so called "blight" of neighborhoods effects public health to a great degree. Pre-K children who live in proximity to abandoned buildings or vacant lots were shown to have lower literary scopes than children who do not.²⁸ Violence, higher rates of chronic illness, stunted brain and physical development,

²⁵ *Id.*

²⁶ Local Initiatives Support Corporation. 2020. *The Impact of Abandoned Properties on Public Health | Local Initiatives Support Corporation*. [online] Available at: <<https://www.lisc.org/our-resources/resource/impact-abandoned-properties-public-health/>>

²⁷ Urban Institute, 2017. *Urban Blight and Public Health*. [online] Urban Institutionalization, pp.1-11. Available at: <https://www.urban.org/research/publication/urban-blight-and-public-health/view/full_report>

²⁸ *Id.*

unhealthy exercise and eating habits, and a breakdown of social networks and capital were all linked to living in the proximity of vacant properties.²⁹

III. The Lack of Effective Adaptive Reuse Ordinances

Susquehanna Township currently does not have an Adaptive Reuse ordinance that is focused on the reuse of vacant or unused commercial buildings. With the effects of coronavirus suddenly forcing businesses to go fully remote, our ordinance seeks to solve that problem. The Township follows an International Property Maintenance Code which regulates minimum maintenance for existing buildings and exterior property areas.³⁰ The code provides specific criteria for regulating the maintenance requirements of vacant structures and land but this code does not assist in adapting these structures so they may be used once again. It only perpetuates the vacancy until an adaptive reuse ordinance is adopted and at that point a maintenance code for vacant buildings is no longer important. Additionally, Susquehanna Township is made up of conservation, residential, commercial, industrial and mixed-use districts.³¹ They have not zoned in any Adaptive Reuse districts, which other municipalities have begun to add.

IV. Various Approaches to Solving Commercial Building Vacancy

Fortunately, multiple jurisdictions similar in size and character of Susquehanna Township have implemented adaptive reuse ordinances. These ordinances were not created with the current pandemic in mind, but can be extremely helpful nonetheless. Commercial building vacancies will go up; therefore, these ordinances will further assist the problem. This fact also exemplifies

²⁹ *Id.*

³⁰ 2018 IPMC: International Property Maintenance Code, (2017).

³¹ Susquehanna Township, 17-04. 27-204; 27-201.

that these cities were already trying to deal with issues of building vacancies before coronavirus. If they were not, there would not be a need to introduce ordinances that incentivize adaptive reuse. Since these jurisdictions are similar in nature to Susquehanna, they are quality reference points to determine what may work and what may not work for Susquehanna. Susquehanna Township's population is about 25,000 with a median income of about \$65,000.³² A similar township that decided to take action in the reuse of vacant buildings is Whitehall Township. Whitehall is located in Lehigh, County, Pennsylvania and has a population of 27,000 and a median income of \$62,000.³³ Although a city, Easton, Pennsylvania, has a population of 27,000 and median household income less than both Whitehall and Susquehanna at \$50,000.³⁴ The main similarity in both of these ordinances and the majority of ordinances in larger cities as well, is that their main goal is to revitalize areas by increasing opportunities for affordable housing through adaptive reuse. Also, the redevelopment of these areas must comply with code that is already in place for the townships. These ordinances also add certain maximums to building heights in which rehabilitation will take place. What these ordinances seem to exclude are incentives for builders and investors to reuse these old or unused buildings. They list the environmental benefits of the adaptive reuse but do not give clear, monetary incentives such as tax breaks, increased density bonuses or breaks on fees or application reviews.³⁵

³² Census Bureau QuickFacts. 2020. *U.S. Census Bureau Quickfacts: Susquehanna Township, Dauphin County, Pennsylvania*.

³³ Census Bureau QuickFacts. 2020. *U.S. Census Bureau Quickfacts: Whitehall Township, Lehigh County, Pennsylvania*.

³⁴ *Id.*

³⁵ Montgomery County Courthouse, Planning Commission, 2020. *Promoting Workforce Housing, Expanding Locations and Developmental Potential*. Montgomery County.
n.d. *Incentive Strategies: Density Bonuses, Fee Waivers & Expedited Approvals*. [online] pp.1-4. Available at: <https://www.law.ufl.edu/_pdf/academics/centers-clinics/clinics/conservation/resources/incentive_strategies.pdf>

A. *How to Accomplish Adaptive Reuse*

In order to accomplish adaptive reuse, a municipality must make it clear for developers where these projects may take place and must incentivize developers to do so. If these two factors are not met, ordinances that could be strong in effecting the environmental, economic, and social facets of the community will still fall short. Unfortunately, it takes more than promising environmental efficiency and sustainability in the long term to please constituents who want benefits in the short term.

During the current Covid-19 pandemic, municipalities were forced to adopt adaptive reuse measures and did so efficiently with cases increasing exponentially. In New Orleans, emergency facilities were built by repurposing the New Orleans Convention Center as a 3,000-bed facility for patients.³⁶ Chicago did the same for their McCormick Place convention center and were able to supply 3,000 beds as well.³⁷ These actions were both seen as effective quick measures of adaptive reuse to care for their citizens and provide social well-being.³⁸

A common theme in both the Easton and Whitehall ordinances for adaptive reuse is that they start by creating districts for where the adaptive reuse should take place. These districts are the most desperate need of change through adaptive reuse. In Easton, the Adaptive Reuse District is

³⁶ Ebersole, G., 2020. Measuring a pandemic's impact on the built environment. *Central Penn Business Journal*, [online] p.1. Available at: <<https://www.cpbj.com/measuring-pandemics-impact-built-environment/>> [Accessed 4 October 2020].

³⁷ *Id.*

³⁸ Ebersole, G., 2020. Measuring a pandemic's impact on the built environment. *Central Penn Business Journal*, [online] p.1. Available at: <<https://www.cpbj.com/measuring-pandemics-impact-built-environment/>> [Accessed 4 October 2020].

separated into six sections around the township.³⁹ Within these districts, commercial buildings can be repurposed for a myriad of uses but most importantly for single-family detached dwellings. Easton also breaks down the dimensional criteria for each type of building that will be repurposed such as minimum lot requirements, minimum yard setbacks and maximum building height. Design standards are also put into place to ensure that the adaptive reuse complies with existing zoning ordinances. These include, for example, street widths and building sizes/types. The purpose of these areas is to promote the redevelopment and revitalization of underutilized and underperforming areas of the City with mixed residential and commercial uses and industrial development.⁴⁰ The total size of the district is 74 acres or 1.1% of the land in Easton, and 125 parcels or 4.3% of all parcels in the City.⁴¹ Similarly to Easton, Whitehall is allowing all residential districts be used as areas where adaptive reuse could take place.⁴² Both make clear emphasis on the importance of adapting residential properties and have clear specifications for the maximum heights, distance from streets and minimum building separations. This is essential because it is imperative to let building developers know clearly and concisely what they can and cannot do when taking on an adaptive reuse project. Specific to Whitehall, their ordinance only allows up to 50% selective demolition to a property that requires a specific change in order to be reused.⁴³ For example, these may be minor additions to a building that do not seriously change the nature of the building. Whitehall also requires the principal building to be over 5,000 square feet and exist for at least 50 years. Additionally, Whitehall created maximum densities for each

³⁹ Easton, Pa., Municipal Code § 595-115 (2015).

⁴⁰ *Id.*

⁴¹ *Id.*

⁴² Wojcik, S., 2018. Whitehall looks to encourage affordable housing redevelopment in vacant buildings. *The Morning Call*, [online] p.1. Available at: <<https://www.mcall.com/news/local/whitehall/mc-nws-whitehall-affordable-housing-20180831-story.html>>

⁴³ Whitehall Township, Pa., Municipal Code § 27-199.1 (E) (2016)

building dependent on the square footage of the building. Also, the ordinance does not forget to mention residential parking because that will be a natural effect of turning commercial buildings into residential ones. These include parking space sizes, parking lot setbacks and property owner clean up requirements. In regard to logistics, the adaptive reuse of a building in Whitehall must comply with all building codes and include a site plan designed by a registered design professional. Once this is completed, the plan be reviews by the Fire Code Official and Township Engineer. After these tasks are fulfilled and approved, the adaptive reuse of the building can commence. Unfortunately, these ordinances do not give great detail on specifications for buildings that are much larger such as office buildings. With the effects of coronavirus continuing to force business models to remote models, our ordinance will need to take into consideration large empty office buildings.

The incentivization of developers within the ordinance is of the utmost importance if municipalities hope to reduce the amount of vacant commercial buildings, especially during a pandemic. Developers must be motivated to make adaptive changes to existing commercial buildings. First, a Township can provide density bonuses which allow developers to build more units in an area than permitted under normal zoning limits.⁴⁴ This is a great way to incentivize developers because it allows them to add more residents, which otherwise would not have been if it were not for choosing to adapt and reuse. By analogy, Lower Salford Township adds half a dwelling unit per acre when affordable housing is provided.⁴⁵ As a result, additional small-lot singles, twins, townhouses and apartments can be built.

⁴⁴ Montgomery County Courthouse, *supra* note 35 at 1.

⁴⁵ *Id.*

Density bonuses along with other incentives such as fee waivers and expedited approval processes will motivate developers to provide public benefits.⁴⁶ Development projects are costly and time consuming so any help is appreciated by developers, and that is where procedural incentives come into play. By expediting approvals of the needs and requests of the developers, it assists the developer in completing the project as soon as possible. Thus, he/she may move onto the next project. As a result, the community will witness public benefits sooner rather than later.

Susquehanna Township must make it clear to developers and constituents that adaptive reuse is the answer over demolition. It must incentivize developers to choose adaptive reuse through different zoning bonuses and procedural acceleration. Developers will realize that these rehabilitation projects will not only benefit the public, but also increase their productivity. As a result, adaptive reuse will benefit all parties by housing new residents, increasing construction projects and rejuvenating the overall community.

B. Measuring Effectiveness

It is difficult to measure the effectiveness an ordinance that was adopted recently. For ordinances put into place years ago, enduring amendments and additions along the way, effectiveness can be measured by the benefits gained from adaptive reuse by the citizens, economy, and environment of the Township. The adaptive reuse ordinance for Whitehall was added in October, 2016 and the ordinance for Easton was adopted merely three months ago on October 8, 2020. It is easier to measure the effectiveness of the Whitehall ordinance because it

⁴⁶ n.d. *Incentive Strategies: Density Bonuses, Fee Waivers & Expedited Approvals*. [online] pp.1-4. Available at: <https://www.law.ufl.edu/_pdf/academics/centers-clinics/clinics/conservation/resources/incentive_strategies.pdf>

was adopted four years ago but that is still not an expansive amount of time to allow developers to take advantage of the ordinance due to the nature of construction projects. Given the recency of Easton's ordinance, it is impossible to measure its effectiveness. Fortunately, there is ample data and a plethora of examples that can assist in determining how effective these ordinances are compared to others.

For both of these jurisdictions, their goal was to make it easier and incentivize developers into adapting older vacant commercial buildings instead of demolishing them and starting new projects. Whitehall was focused on turning these buildings into affordable multi-family housing, which lower income citizens could take advantage of. Easton does not break down what adaptive reuse actually is and why it is needed in the areas they believe adaptive reuse should take place. Whereas Whitehall's ordinance does a much better job in detailing what adaptive reuse actually is and why it is so important for the community. It provides certain details and definitions of adaptive reuse to help readers of the ordinance better understand its purpose and benefits. Easton uses a long list of all of the permitted business/building types in which adaptive reuse may take place, whereas Whitehall provides a succinct and detailed breakdown of broad areas where reuse may take place and why it must take place there (to target households below 60% area median income).⁴⁷

Two years after the inception of the Whitehall Township adaptive reuse ordinance, the municipality was determined to expand the ordinance to cover more areas of the township.⁴⁸ This might sound completely positive, but a local developer was not content with the specific districts in which adaptive reuse may take place. As a result, the developer threatened the municipality

⁴⁷ *Whitehall Township, Pa., Municipal Code § 27-199.1 (E) (2016)*

⁴⁸ *Wojcik, S., 2018. supra note 39, at 1.*

with a lawsuit. The ordinance “included all residential districts but did not include two types of commercially zoned districts that allow for mixed-use projects, which can include housing,” and the expanded ordinance would add those districts into the adaptive reuse mix.⁴⁹ The ordinance was focused on incentivizing developers to start rehabilitation projects on commercial buildings but it did not do that. Building developers should be heavily incentivized and support the ordinance if the municipality wants them to work on projects that provide substantial benefit to the public as well. A developer filing a lawsuit against the municipality may not be a sign that the ordinance is ineffective, but if it is the mindset of most developers that the ordinance does not help them but harm them, the ordinance will fail.

Surprisingly, the origin of the ordinance in 2016 was not sprung out of altruistic intentions to help the environment, increase sustainability or attract new investment in the area, but to squash a possible lawsuit against the Township. In 2014, the Zoning Hearing Board denied PathStone Housing’s attempt to turn a vacant mill into 49 apartments for low- and moderate-income renters. The Township shut it down stating on-site parking zoning violations as the reason. In reality, this decision was made to satisfy community members that believed the township would turn into Newark, New Jersey. Thus, the municipality listed to them and denied PathStone’s application. Fortunately, PathStone was willing and ready to file suit with a claim of discrimination under the Fair Housing Act. To avoid litigation, Whitehall adopted with the Adaptive Reuse ordinance. PathStone was able to begin their project creating 49 apartments for low- and moderate-income renters and it was subsequently completed.⁵⁰ Although this

⁴⁹ *Id.*

⁵⁰ Duffy, K., 2016. Whitehall settles accusation of housing discrimination with feds. *The Morning Call*, [online] p.1. Available at: <<https://www.mcall.com/news/local/whitehall/mc-whitehall-hud-housing-agreement-20161214-story.html>>

information is not direct data about the ordinance itself, it lends assistance as to why the ordinance is currently still not seen as beneficial for both the Township, citizens and developers. If the Townships' citizens have a pre-conceived notion that low- and- moderate income housing will bring criminals or people who they do not want living in their town, the community will not prosper once the ordinance is put into effect. The citizens say they do not want a crime riddled town but what they really do not want are minorities in their neighborhoods. It is politically correct to complain about the dangers that low-income citizens can bring to a community, but it would be unacceptable to say that they do not want more Blacks or Latinos. If that mindset does not change, the new residents will not feel the comfort of a new home if the rest of their community despises them not because they are poor but because of the color of their skin. This is an issue that adaptive reuse ordinances that strive to add more affordable housing have to manage. Additionally, if the ordinance does not benefit but surprisingly consequence developers, causing them to file suits against the Township, the ordinance's creation was pointless.

The Township did not intend to create this ordinance. If it were not for vehement push back by an organization trying to provide housing for people in need of it, adaptive reuse might not be taking place in the Township. This was not the correct way to procedurally go about putting into place an adaptive reuse ordinance. Even so, the ordinance was adopted and along with that comes the positives of adaptive reuse that can be measured.

A long list of results can be measured to determine the effectiveness of adaptive reuse on sustainability for the municipality in which it is implemented. An increase in energy conservation, outside investment into the area, and social wellbeing are just a few signals that the rehabilitation may be working.

In 2009-2010, Hong Kong carried out a survey to determine how many of their industrial/office buildings were vacant in order to address this serious issue in their city. They determined that amount of vacant buildings was 5.6% by the end of 2014 but that number was decreasing due to revitalization measures.⁵¹ Therefore, the most clear and effective measure of the effectiveness of adaptive reuse is the amount of vacant buildings post-implementation. As seen in Hong Kong, if the amount of vacancies decreases after an adaptive reuse ordinance is implemented, the plan is working. Adaptive reuse was a major driver of market demand in Hong Kong and its commitment to sustainability. It was found that adaptive reuse of existing buildings reduced negative impact on the environment. Thus, adaptive reuse garnered a great response from the community.⁵² As a result, a positive trickle-down effect will occur because citizens become increasingly more open to additional adaptive reuse projects.

As coronavirus continues to shock our nation and the world, citizens are questioning if they should ever return to working in buildings. This view is apparent in Susquehanna so adaptive reuse must be accompanied by safe and environmentally friendly measures. Improving health by improving ventilation, removing toxic substances and adding plants to commercial buildings being repurposed for residential use is extremely effective for both the environment and social wellbeing of the community.

V. Recommendations for Susquehanna Township

Our revised zoning ordinance establishes regulations related to the adaptation of commercial properties for reuse as residential and mixed-use properties. The purpose of this

⁵¹ Tan, Y., Shuai, C. and Wang, T., 2018. Critical Success Factors (CSFs) for the Adaptive Reuse of Industrial Buildings in Hong Kong. *International Journal of Environmental Research and Public Health*, 15(7), p.1546.

⁵² *Id.*

ordinance is to promote the development and revitalization of underutilized buildings within the township by adapting them. It also focuses on the economically distressed buildings created by the Cov-19 pandemic. The ordinance shall apply only to specific districts within the Susquehanna Township Zoning Map. We learned from both Whitehall and Easton that specifying certain districts where adaptive reuse can take place and, in this case, those with commercial buildings, can prove helpful in the effectiveness of the ordinance.

The general requirements of the ordinance will give developers clear instruction on how to accomplish adaptive reuse and help them understand their limitations if they choose to adaptively reuse a commercial property. Accordingly, developers will not be able to demolish 90% of the building and only reuse 10%. Selective demolition will only be permitted up to 50% of the existing structure so the building preserves its character. Our ordinance will have density bonuses which are dependent on the square footage of the building as well. It breaks down what is required of developers if they plan on having their adaptive reuse project approved. The majority of these requirements were derived from the language in both the Whitehall and Easton adaptive reuse ordinances. Structural requirements are also listed for specific detailing of foundational requirements for the prospective adaptive reuse buildings. An additional key element of the ordinance are multiple family dwelling requirements which details minimum floor area square footage and condominium sales. Additionally, applications for permits must be submitted which will be reviewed and acted upon by the Zoning Officer. The permit fee is \$0 to encourage applicants to follow this ordinance and practice sustainable behavior.

In order to incentivize developers to take advantage of the ordinance, density bonuses are included. Increasing development density not only allows developers to add units to the property

but it also adds opportunities for citizens to find a new residence. If all the requirements are met, the maximum dwelling units may increase from fourteen to eighteen.

In regard to enforcement, the Township Zoning Officer shall be responsible for the administration and enforcement of the zoning code. If there is an appeal of the Zoning officer's decision, it shall be heard by the Susquehanna Township Hearing Board.

VI. Conclusion

In conclusion, the implementation of adaptive reuse in Susquehanna township will enhance the sustainability of the community. The benefits of adaptive reuse include increased energy efficiency and environmental healthiness, economic strength with thriving businesses, and strong social well being for the community. The problems with commercial building vacancies are too detrimental to be left unattended to. Cities around the country that adopted adaptive reuse ordinances have experienced overall effective sustainability results in terms of the environment, economy and social well-being of their municipalities. Susquehanna Township can witness the same results and persevere through the changes triggered by the pandemic and end up in a better place than beforehand. By repurposing commercial buildings, hundreds if not thousands of lower-income citizens can find safe and affordable living. Adaptive can accomplish this. It seeks to transform Susquehanna Township without taking drastic measures. Being innovative in the repurposing of commercial buildings which are vacant or are due to be vacant with the rise of remote working as a result of coronavirus can be one of the most sustainably driven actions the Township can accept to turn itself into a prospering Township. After all, if it were not for the Black Death, the emergence of the Italian Renaissance would never have occurred afterwards.

SUSQUEHANNA TOWNSHIP MODEL ORDINANCE

**ADAPTATION OF COMMERCIAL
PROPERTY FOR REUSE AS
RESIDENTIAL AND MIXED-USE
PROPERTY**

Section 101. Purpose.

The purpose of this ordinance is TO:

- (1) Apply adaptive reuse concepts to promote the redevelopment and revitalization of underutilized and underperforming commercial properties within Susquehanna Township by adapting such buildings to residential and mixed-use properties.⁵³
- (2) Provide sustainable options to contractors and developers seeking to build and develop new properties within the commercial zoning districts of the township.⁵⁴
- (3) Repurpose old commercial buildings for new uses and modern functions, other than those originally intended to address present day needs.⁵⁵
- (4) Accommodate reasonable overall community growth, including population and employment growth, and opportunities for development of a variety of residential dwelling types.⁵⁶
- (5) Revitalize commercial districts hit by the Covid-19 global pandemic by converting economically distressed buildings to residential and mixed-use buildings.⁵⁷
- (6) Reduce vacant space as well as preserve the architecture and structure of older commercial buildings.

Section 102. Legal Authority.

This part is enacted and ordained under the grant of powers by the General Assembly of the Commonwealth of Pennsylvania, Act 247 Pennsylvania Municipalities Planning Code, Act of 1968, Art. VI, § 601 (P.L. 805, No. 247).⁵⁸

⁵³ Easton, Pa., Municipal Code § 595-115 (2015).

⁵⁴ *Id.*

⁵⁵ Chester County Planning Commission: Adaptive Reuse (2020).

⁵⁶ Susquehanna Township, Pa., Municipal Code § 27-103 (2003).

⁵⁷ Los Angeles County, Ca., Municipal Code § 26(a) (2001).

⁵⁸ 53 Pa. Stat. § 10101 et seq.

Section 103. General Application.

The application of this ordinance shall apply to zoning districts and properties identified in Susquehanna Township Zoning Map.

https://www.susquehannatwp.com/sites/g/files/vyhlf3896/f/uploads/zoning_map_2017.pdf

Section 104. Scope of Application.

(a) The following are identifiable districts within the Susquehanna Township Zoning Map that this ordinance shall apply to:

(1) Available zoning districts in which the adaptive reuse of commercial properties shall be permitted:

(A) Commercial Office Limited “COL”

(B) Commercial Neighborhood “CN”

(C) Commercial Highway “CH”

The commercial property must currently exist in any one of the identifiable districts mentioned above.

Section 105. Definitions.

“Adaptive Reuse.” The process of repurposing buildings for viable new uses and modern functions, other than those originally intended to address present-day needs.⁵⁹

“Commercial property.” Real estate (buildings or land) intended to generate a profit, either from capital gain or rental income. Commercial property includes office buildings, hotels, malls, retail stores, multifamily housing buildings, warehouses, industrial buildings, and garages.⁶⁰

⁵⁹ Chester County Planning Commission: Adaptive Reuse (2020).

⁶⁰ Wikipedia.org “Commercial Property.” (2020). https://en.wikipedia.org/wiki/Commercial_property.

“Density Bonus.” An incentive-based tool that permits developers to increase the maximum allowable development on a property in exchange for helping the community achieve public policy goals. Increasing development density shall allow for increases in developed square footage or increases in the number of developed units when applied to this ordinance. ⁶¹

“Multiple family dwelling.” Includes all buildings containing at least two housing units which are adjacent vertically or horizontally. If built side-by-side, multiple family dwellings (1) do not have a wall that extends from ground to roof, or (2) share a heating system, or (3) have interstructural public utilities such as water supply/sewage disposal. ⁶²

“Mixed use property.” An area that blends residential and commercial uses through integration of housing and businesses together within the same property.

“Person.” Includes a contractor, developer, corporation, partnership, limited liability company, business trust, other association, government entity (other than the Commonwealth), estate, trust, foundation, or natural person. ⁶³

“Residential High Rise Building.” Buildings that have 13 floors or higher.

“Residential Mid Rise Building.” Buildings that have between 5 to 12 floors.

“Zoning Hearing Board.” A quasi-judicial body that hears and renders decisions regarding specific types of land use actions, as established by the Pennsylvania Municipalities Planning Code.

“Zoning Officer.” The duly constituted municipal official designated to administer and enforce this Chapter. ⁶⁴

⁶¹ Center for Land Use Education: Planning Implementation Tools Density Bonus (2005).
https://www.uwsp.edu/cnr-ap/clue/Documents/PlanImplementation/Density_Bonus.pdf

⁶² United States Census Bureau: Characteristics of New Housing (2019).
<https://www.census.gov/construction/chars/definitions/>

⁶³ 1 PA. CONS. STAT., §1991 (2014).

⁶⁴ Susquehanna Township, Pa., Municipal Code § 27-204 (2006).

Section 106. Adaptive Reuse of Commercial Property General Requirements.

(a) Adaptive reuse shall include selective demolition of up to 50% of the existing structure and reconstruction of these demolished areas and minor additions, said additions keeping in nature and character with the original structure.

(b) Adaptive reuse shall be limited to commercial property, and such structures having existed for a period of 30 years prior to the adoption of this article, that has been vacant, partially vacant or underutilized in that at least 50% of the structure has remained vacant for a minimum period of two consecutive years. ⁶⁵

(c) Exterior changes to the building shall be compatible with the current design of the building and neighborhood. ⁶⁶ The following is not permitted when an applicant changes the exterior of a building under this ordinance:

(1) the addition of any structure that obscures the present view of the surrounding scenery.

(2) the destruction/removal of any long existing exterior symbol or icon. (I.e. a gargoyle or prominent figure attached to the building's exterior.)

(3) any exterior changes to paint or color of the building that does not conform to the surrounding buildings or neighborhoods.

(d) The maximum density shall be limited by the existing square footage of the structures provided that all units meet the following minimum square footages and provided that all applicable building codes and standards are met with respect to occupancy and sleeping areas. ⁶⁷

⁶⁵ Whitehall Township, Pa., Municipal Code § 27-199.1 (E) (2016).

⁶⁶ *Id.*

⁶⁷ *Id.*

(h) Existing structural footprints shall not be extended or enlarged, except to add detached and attached accessory garages, storage areas, outdoor patios, and covered terraces. Alterations to existing buildings may also be made to provide for new points of entry to facilitate direct access to individual dwelling units. All such alterations shall be subject to conformance with stormwater management regulation or any other regulation applicable at the time of the proposed alteration.

(i) The applicant of the adaptive reuse project shall follow all the applicable rules and regulations of Chapter 21 of the Susquehanna Township Municipal Code in relation to sidewalk construction or modification.⁷¹

(j) Unless otherwise approved by the Township, outdoor lighting shall be required for all uses where necessary to provide for public safety and personal security during hours of darkness where there is public assembly and traverse, including but not limited to the following uses: multifamily residential, commercial, industrial, public-recreational and institutional.⁷²

(k) Where an existing loading space is provided, the loading space shall be required to remain, but may also be used as additional parking space when deliveries are not scheduled. Adequate signage shall be provided listing the hours of deliveries and designating when the spaces cannot be used for public or private parking. If no loading spaces exist, then a loading space shall not be required in conjunction with the development of an adaptive reuse project.⁷³

(l) The Zoning Administrator shall require that one or more signs or symbols of a size and design approved by the Fire Department are placed by the applicant at designated locations on the exterior of each Adaptive Reuse Project to indicate the presence of residential uses.⁷⁴

⁷¹ Susquehanna Township, Pa., Municipal Code Chapter 21 (1967)

⁷² Upper Uwchlan Township, Pa., Ordinance 162-58 (2020).

⁷³ Corpus Cristi, Tx., Unified Development Code § 7.12.7(G) (2011).

⁷⁴ Los Angeles County, Ca., Municipal Code § 26(1)(a)(3) (2001).

Section 107. Structural Requirements.

(a) Every exterior foundation, wall or roof shall be weathertight or watertight. Every floor and ceiling shall be sound and tight. All members of the structure shall be kept in good repair and in safe condition.⁷⁵

(b) Every window, exterior door, and basement hatchway shall be weathertight, watertight, rodent-proof, and shall be kept in sound working condition and good repair.⁷⁶

(c) Every inside and outside stair, every porch, and every appurtenance thereto shall be so constructed as to be safe to use and capable of supporting the load that normal use may cause to be placed thereon; and shall be kept in sound condition and good repair by the person or owner.⁷⁷

(d) Where the Code Enforcement Officer deems it necessary for safety, every flight of stairs, which is more than two risers high, shall have handrails which shall be located as required by the Building Code; and every porch which is more than two risers high shall have handrails so located and of such design as required by the Building Code. Every handrail and balustrade shall be firmly fastened and shall be maintained in good condition.⁷⁸

(e) Every dwelling unit and rooming unit shall have safe and unobstructed means of egress leading to safe and open space at ground level, as required by the laws of the Commonwealth and ordinances of the Township.⁷⁹

(f) All exterior surfaces, both wood and metal, of a dwelling shall be kept in sound condition.⁸⁰

⁷⁵ Susquehanna Township, Pa., Ordinance 61-7 § 402 (1961).

⁷⁶ Susquehanna Township, Pa., Ordinance 61-7 § 403 (1961).

⁷⁷ Susquehanna Township, Pa., Ordinance 61-7 § 404 (1961) [as amended by Ord. 74-35, 5/29/1974, § 2].

⁷⁸ *Id.*

⁷⁹ Susquehanna Township, Pa., Ordinance 61-7 § 405 (1961).

⁸⁰ *Id.*

Section 108. Building Design.

- (a) Buildings eligible for adaptive reuse shall have a minimum building height of 25 feet.⁸¹
- (b) Primary entrances shall be located along the street front. Secondary entrances may be located at the side or rear of building.⁸²
- (c) **Mixed use exception only.** Residential mid-rise and high-rise uses shall have retail uses on the first floor. Such retail shall be open to the public and have pedestrian access from the street.⁸³

Section 109. Common Space for Residential Buildings

- (a) Any property transitioned through adaptive reuse from commercial to residential or mixed-use property shall a common space for residents of said property.
- (b) A minimum of 200 square foot of common open space is required per residential unit of applicable building⁸⁴

Section 110. Fencing.

- (a) Prominent facades on street-facing units may not be concealed behind high walls, solid fencing, or privacy fences that provide less than 50% transparency, forward of the front façade of the building.⁸⁵
- (b) Residential units consisting of courtyards and entrances located rearward of the “build-to” line may not be concealed behind high walls, solid fencing, or privacy fences that provide less than 50% transparency.⁸⁶

⁸¹ Easton, Pa., Municipal Code § 595-120 (2015).

⁸² *Id.*

⁸³ *Id.*

⁸⁴ North Bend, WA., Municipal Code, § 17.25.050 (2008).

⁸⁵ Corpus Cristi, Tx., Unified Development Code § 7.12.8(D) (2011).

⁸⁶ *Id.*

Section 111. Multiple Family Dwelling Units Specific Requirements.

(a) Each proposed multiple-family dwelling unit shall have a minimum floor area of 600 square feet unless a reduction in floor area to not less than 400 square feet is approved by Susquehanna Township Zoning Commissioner. ⁸⁷

(b) Individual dwelling units may be sold as separately owned units, e.g., "condos" or may be held in common ownership as rental units. ⁸⁸

Section 112. Off-Street Parking Requirements.

(a) The required number of parking spaces shall equal the number of spaces that existed on the site prior to the enactment of this ordinance and shall be maintained and not reduced. ⁸⁹

(b) Properties that have been rezoned under this ordinance shall meet the following parking requirements:

(1) All parking lots shall be placed in the rear yard. Where possible, access to the parking lots shall be an alleyway or rear driveway. ⁹⁰

(2) The sharing of parking lots or use of public parking facilities shall be considered an option for all uses in the area. ⁹¹

(3) Parking lot layout, landscaping, buffering, and screening shall prevent direct views of parked vehicles from streets and sidewalks, avoid spill-over light, glare, noise, or exhaust fumes onto adjacent properties, in particular residential properties, and provide the parking lots with a reasonable measure of shade, when trees reach maturity. Parking lots exposed to view shall be

⁸⁷ Upper Uwchlan Township, Pa., Ordinance 200-7.1 (D)(1) (2020).

⁸⁸ *Id.* at 200-7.1 (D)(2)

⁸⁹ Los Angeles County, Ca., Municipal Code § 26(h)(3) (2001).

⁹⁰ Susquehanna Township, Pa., Municipal Code § 27-1406 (2003).

⁹¹ *Id.*

surrounded by a minimum five-foot high, year-round visually impervious screen, hedge, or wall. The height of any required screen, hedge, or wall shall decrease where driveways approach sidewalks or walkways and shall not interfere with clear sight triangle requirements.⁹²

(4) Multiple family dwellings shall have 2 spaces per dwelling unit.

(A) Unless the adaptive reuse of a building is for the purpose of a retirement home for seniors aged 62 and older with more than 50 units, then 1.1 spaces per dwelling unit is permitted.⁹³

Section 113. Permitting Requirements.

(a) A permit for the adaptive reuse of commercial properties zoned and identified in this ordinance's section 104(a)(1) shall be required when an applicant proposes the following:

- (1) the addition or alteration of any commercial building or portion thereof;
- (2) the use or change in use of a commercial building; and
- (3) the change or extension of a nonconforming use of a commercial property.

It shall be unlawful for any person to commence work for the alteration or addition of any commercial building zoned or identified in this ordinance's section 104(a)(1) until a permit has been duly issued.⁹⁴

(b) The applicant for adaptive reuse of a commercial property shall include a site plan prepared by a registered design professional indicating the lot area, parking proposed, the division of the structure, if proposed, surrounding uses, and an elevation drawing.⁹⁵

⁹² *Id.*

⁹³ *Id.*

⁹⁴ Susquehanna Township, Pa., Municipal Code § 27-2603 (2003).

⁹⁵ *Id.*

(c) All applications for permits shall be accompanied by plans in duplicate, drawn to scale, showing the actual shape and dimensions of the lot to be built upon, the exact size and location of any buildings existing on the lot, the lines within which the proposed building or structure shall be altered, the existing and intended use of each building or part of a building, the number of families or dwelling units the building is designed to accommodate and such information as may be necessary to determine compliance with this Chapter and all other ordinances. One copy of such plans shall be returned to the owner when such plans have been reviewed and acted upon by the Zoning Officer. All applications with accompanying plans and documents shall become a public record after a permit is issued or denied.⁹⁶

(d) Applicants proposing alterations of existing facades as viewed from any public street shall be subject to conditional use approval upon the review and recommendation of the Susquehanna Township Zoning Officer.⁹⁷

(e) Applicants shall include in the permit a brief explanation regarding a series of factors used to determine to what extent or percentage that building should be demolished. Such factors an applicant shall list in application are as follows:

- (1) economic impact
- (2) social impact
- (3) the environmental impact to the surrounding community.

(f) The permit application fee shall be \$0, as to encourage applicants to follow this ordinance in favor of sustainable practices.

⁹⁶ *Id.*

⁹⁷ Upper Uwchlan Township, Pa., Ordinance 200-7.1 (D)(4) (2020).

Section 114. Approval/Denial Criteria.

(a) No permit shall be issued until the Zoning Officer has certified that the proposed building, addition or alteration, complies with all the provisions of this Chapter.

(b) A permit issued hereunder shall become void 12 months after issuance date unless a request for extension has been submitted to and approved by the Zoning Officer. Such request shall be filed with the Zoning Officer at least 30 days prior to the permit expiration date.⁹⁸

(c) Approval of an adaptive reuse of commercial property permit will be met when applicant satisfies all of the criteria mentioned within this ordinance and the Zoning Officer so deems the permit as satisfactory.

Section 115. Density Bonus Incentives.

(a) Increasing development density shall allow for increases in developed square footage or increases in the number of developed units when the following is met:

(1) Whenever the applicants adaptive reuse proposal includes on-street parking along 80% of all of the internal street frontages, the applicant may increase the base density by an additional one dwelling unit per gross acre.⁹⁹

(2) Whenever the applicants adaptive reuse proposal includes demolition of under 25% of the building, the applicant may increase the base density by an additional one dwelling unit per gross acre.¹⁰⁰

⁹⁸ *Id.*

⁹⁹ Susquehanna Township, Pa., Municipal Code § 27-1905 (2003).

¹⁰⁰ *Id.*

(3) Whenever the applicants adaptive reuse proposal includes alleys servicing at least 80% of all buildings, the applicant may increase the base density by an additional one dwelling unit per gross acre.¹⁰¹

(4) Whenever the plan includes at least 2% additional greens, beyond the 3% required in § 27-1907 of the Susquehanna Township Municipal Code, the applicant may increase the base density by an additional one dwelling unit per gross acre.¹⁰²

If all of sections 115 (a)(1)-(4) are met, then the maximum dwelling units per gross acre may increase from 14 to 18 for multiple family dwelling units.¹⁰³

Section 116. Enforcement.

(a) The Township Zoning Officer shall be responsible for the administration and enforcement of this code.¹⁰⁴

(b) Subject to the limitations of the Constitution of the United States and of the Commonwealth of Pennsylvania, and in order to carry out the purpose and provisions of this chapter, the Township Code Enforcement Officer, upon showing proper identification of office, may enter and inspect any dwelling at all reasonable times and in an emergency at any time. The owner, operator or occupant of any dwelling shall give the Township Code Enforcement Officer free access for the purpose of such inspection.¹⁰⁵

¹⁰¹ *Id.*

¹⁰² *Id.*

¹⁰³ *Id.*

¹⁰⁴ Susquehanna Township, Pa., Ordinance 61-7 §203 [as amended by Ord. 74-35, 5/29/1974, § 2] (1961).

¹⁰⁵ *Id.*

(c) An owner of a dwelling or his authorized agent may enter the dwelling at all reasonable times for the purposes of complying with any provision of this code or with any regulation issued hereunder.¹⁰⁶

(d) The Zoning Officer shall note any violations related to the permitting and requirement sections of this ordinance. Any such violation shall affect the judgement of the Zoning Officer's approval or denial of applicant's proposal for adaptive reuse.

Section 117. Consideration of Adaptive Reuse Project.

Any person, contractor, or developer who seeks to purchase and develop property identified in Section 104(a)(1) "adaptable zoning district" shall be required to consider the theory of adaptive reuse before determining complete destruction of the property. Factors to determine whether adaptive reuse or complete demolition of a property are ones such as: Economic impact, social impact, and the environmental impact to the surrounding community. Determination of such factors are viewed in the permitting application.

Section 118. Severability.

If any section, subsection, paragraph, sentence, clause, or phrase of this Chapter shall be declared invalid for any reason whatsoever, such a decision shall not affect the remaining portions of the chapter, which shall remain in full force and effect, and for this purpose the provisions of this Chapter are hereby declared to be severable.¹⁰⁷

¹⁰⁶ *Id.*

¹⁰⁷ Susquehanna Township, Pa., Municipal Code § 8-204

Section 119. Appeals.

Appeals of the zoning officer's approval or denial of this ordinance shall be appealed to the Susquehanna Township Hearing Board.

Section 120. Repeals.

(a) As this is a model ordinance and Susquehanna Township does not currently have an ordinance in effect that allows for the adaptive reuse of commercial property therefore the only repeals that shall apply are to this model ordinance itself.

(b) Repeals of specific sections within this ordinance are permitted where deemed necessary by the Susquehanna Zoning Hearing Board.

Section 121. Effective Date.

This ordinance shall take effect sixty (60) days after enactment.