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April 15, 2021

Via Email Only

Hon. Karen A. Tarapata, Mayor
Village of Upper Nyack Board of Trustees
Michael Esmay, Deputy Mayor/Trustee
Jeffrey M. Epstein, Trustee
Laurie Dodge, Trustee
Kennon Rothchild, III, Trustee
328 N. Broadway
Upper Nyack, NY 10960

Re: Proposed “Noise Law of the Village of Upper Nyack.”

Dear Mayor Tarapata and Village of Upper Nyack Board of Trustees:

This office represents Goosetown Environmental Action (“GEA”), an association of Village of Upper Nyack residents in and around the Van Houten’s Landing Historic District. We write to provide public comment on the proposed Local Law 5 of 2021 entitled “Noise Law of the Village of Upper Nyack” (the “Noise Law”). As you are aware, GEA’s membership includes numerous residents located near K. Graefe & Sons Corp. d/b/a North River Shipyard (the “Shipyard”) located at 1 Van Houten Street. Noise impacts from the Shipyard have been a constant and significant concern for GEA because of the Shipyard’s evolution from a personal watercraft storage and maintenance boatyard to an industrial shipyard.

GEA appreciates the Village’s first steps towards a meaningful noise ordinance but believes the current Noise Law does not strike the proper “balance [between] the rights of residents and property owners to use their property in a reasonable manner with the rights of others in the Village to be free of excessive, continuous, unnecessary or disturbing noise.” To that end, GEA urges the Village to adopt a quantitative, performance standards approach to a noise ordinance instead of the proposed nuisance-based approach. A quantitative approach is more consistent with the Draft Comprehensive Plan dated October 30, 2020, has been successfully implemented in a number of municipalities, establishes clear standards for compliance and enforcement, and is more likely to actually reduce the level and frequency of “unreasonably disturbing or excessive noise within the Village of Upper Nyack.” GEA also encourages the Village to substantially increase the penalties for violation of the Noise Law,

especially for commercial and repeat offenders, to avoid the risk that violations become merely “a cost of doing business.”

In addition to the comments below, we have attached the comments of professional planner J. Theodore Fink, AICP, of Greenplan, Inc., regarding his review of the proposed Noise Law (the “Greenplan Letter”). Mr. Fink has been a professional planner in New York State for over 40 years, representing government and private clients, and training and assisting municipal boards in environmental and land use responsibilities. **His curriculum vitae is attached to his correspondence.**

I. The Noise Law is inconsistent with the Draft Comprehensive Plan.

As the Greenplan Letter notes, the Village’s Comprehensive Plans seek to promote the Village’s “peaceful, quiet, scenic, suburban and small town” character. (1999 Comprehensive Plan Planning Goal A). The 2020 Draft Comprehensive Plan calls for the Village to establish performance standards for noise and to “Establish acceptable levels of noise for residential areas and for commercial/business areas that abut residential areas.” (Draft Comprehensive Plan dated October 30, 2020). (Greenplan Letter p. 2-3). The Greenplan Letter explains that there are two basic forms for noise ordinances – quantitative and qualitative. (Greenplan Letter p. 2). The Draft Comprehensive Plan’s recommendation for performance standards and establishing acceptable levels of noise endorses a quantitative approach. (Greenplan Letter p. 6). However, the proposed Noise Law constitutes a qualitative or nuisance-based approach that does not address the Comprehensive Plan’s clear recommendation. (Greenplan Letter p. 2, 6).

Most noise regulations adopted today and favored by noise experts are quantitative approaches that “proscribes noise-producing conduct by a performance standard, applying a scientific basis for sound intensity and frequency. The quantitative approach provides non-discretionary, objective and predictable standards.” (Greenplan Letter p. 6). The Village should amend the proposed law to utilize a quantitative instead of qualitative approach consistent with the Draft Comprehensive Plan recommendations.

II. A quantitative approach is more enforceable.

The proposed Noise Law’s use of a qualitative, nuisance-based approach creates significant difficulties for enforcement not created by utilizing a quantitative approach. As Greenplan summarizes, in the 1970s the EPA analyzed noise control ordinances and prepared a model ordinance utilizing a quantitative approach. The EPA determined that “existing community noise ordinances are based on outmoded model ordinances and/or the common law approach to noise control which relies exclusively on *difficult to enforce nuisance provisions.*”

Therefore, it proposed the quantitative approach that “should result in ordinances *which are more easily enforceable* than may have been in the past.” (Greenplan Letter p. 4).

Several features of the proposed Noise Law make future enforcement and efficacy problematic. First, in relation to the section regulating the use of heavy machinery, the Noise Law sets a requirement that noises “audible from a distance of 100 feet or more from the property line . . . must cease for 30 minutes within every three hours of operation.” To enforce this requirement, enforcement authorities would have to remain at the property being investigated for significant periods of time to confirm violations. This requirement would divert Village employees and Town police to an unreasonable extent, resulting in an effectively unenforceable requirement. (Greenplan Letter p. 6). Second, the Noise Law utilizes vague language open to interpretation. As the Greenplan Letter notes the use of terms such as “plainly audible” and “continuous,” create “an enforcement dilemma” by creating arguments over how such terms should be defined and applied. (Greenplan Letter p. 6, 8). In relation to heavy machinery, § C(III) of the Noise Law requires that “[w]ork involving the use of heavy machinery . . . that emits continuous sound” must cease for 30 minutes every three hours. While this provision clearly applies to continuous use of a single piece of heavy machinery, it is not clear whether it applies to work using a single piece of heavy machinery intermittently or work that uses different pieces of heavy machinery over three hours but no single piece of machinery continuously for the three-hour period. The vague terminology creates ambiguity that does not inform the community, the noise producer, or enforcement personnel as to what actions are prohibited. Finally, the ambiguities and lack of clear connection to the Draft Comprehensive Plan or the stated Legislative Intent presents potential grounds for legal challenge. “Courts look to legislative intent to determine whether to uphold the imposition of new regulations if challenged.” (Greenplan Letter p. 6). Thus, the proposed Noise Law presents significant challenges to enforcement, undermining the purpose of the Noise Law to reduce “excessive, continuous, unnecessary or disturbing noise.”

In contrast to the proposed Noise Law’s qualitative approach, a “quantitative approach provides non-discretionary, objective and predictable standards” and has “proven enforceability.” (Greenplan Letter p. 6). A definitive set of performance standards inform noise producers of what conduct is prohibited, establishes clear standards for enforcement personnel to determine whether a violation exists, and avoids the ambiguity that promotes legal challenges. Finally, because the Draft Comprehensive Plan recommends establishing performance-based standards, no challenge exists that a quantitative noise law is inconsistent with the Comprehensive Plan or Legislative Intent.

III. A quantitative approach is more likely to reduce the excessive noise in the Village.

The Greenplan Letter clearly explains that “the qualitative approach being considered by the Village will not reduce overall noise levels but will merely provide a time when they cannot occur by somehow allowing for a short break in the times when loud noises can be produced, thereby ignoring the overall health impacts of loud noise on Village Residents.” (Greenplan Letter p. 6). Instead of bringing a stop to the “unreasonably disturbing or excessive noise within the Village of Upper Nyack,” the proposed Noise Law actually “gives license to create it.” (Greenplan Letter p. 5)

The New York State Department of Environmental Conservation (“DEC”) Program Policy “Assessing and Mitigating Noise Impacts” provides guidance regarding the impact of noise at different levels and notes that noise at 70 decibels is generally “intrusive.” (DEC Policy p. 19). In fact, “[m]ost humans find a sound level of 60-70 dB(A) as beginning to create a condition of significant noise effect.” (DEC Policy p. 14). The DEC identifies noise levels of 80 decibels as “annoying” and 90 decibels as “very annoying” and causing hearing damage after 8 hours, continuous exposure. (DEC Policy p. 19).

The proposed Noise Law does not distinguish between noises that are audible but “quiet” from those that are “annoying,” “very annoying,” or even greater.¹ In relation to heavy machinery, the DEC guidance notes the decibel levels of numerous common equipment ranging from 67 to 98 decibels at 50 feet.² (DEC Policy p. 18). Moreover, when multiple pieces of machinery are involved, sound levels can have an additive effect increasing the sound levels. (DEC Policy p. 8-9). Thus, while the proposed Noise Law limits the hours in which certain types of noise emitting equipment can be utilized, it does not require the elimination of excessive noise or otherwise affect the “level and frequency of occurrences of such noises.” As the DEC Program Policy notes, “[i]mplementation of hours of operation does not reduce the [sound pressure level] emanating from a facility.” (DEC Policy p. 24). Thus, hour limits alone are not sufficient to mitigate excessive noise impacts. The proposed Noise Law does not address noise levels that are “a detriment to the public health, comfort, convenience, safety and welfare of the citizens of the Village” but merely proposes moderate limits on when such detrimental noises can be produced.

¹ The proposed Noise Law references “audible” levels at certain distances however, it is not clear what “audible” and “plainly audible” mean under the Noise Law. The DEC Program Policy notes that noise at 10-15 decibels is “just audible” and 50 decibels is “quiet.” (DEC Policy p. 19).

² The DEC Program Policy notes that sound level reduces just 6 decibels from 50 to 100 feet. (DEC Policy p. 8). Thus, these common pieces of heavy machinery produce noise at 100 feet from 61 to 92 decibels. Of note, sound levels reduce just 6 decibels every time the distance doubles after 50 feet. (*Id.*).

As the Greenplan Letter notes, a noise study prepared for GEA in the vicinity of 6 Van Houten Street measured noise levels consistently above 70 decibels with readings as high as 107.1 and 108 decibels. (Greenplan Letter p. 3). The proposed Noise Law makes no distinction between these noise levels, merely limiting all such intrusive and damaging noise to certain time periods. Such an approach will not reduce any such disturbing and excessive noise or significantly improve the “rights of [residents in the Van Houten Landing Historic District] to be free of excessive, continuous, unnecessary or disturbing noise” as the legislative intent of the proposed Noise Law asserts.

To reduce the level and frequency of excessive and disturbing noise, the Village should use a quantitative approach setting specific standards for residential and commercial districts. This method of noise limitation is consistent with the guidance from numerous state, federal, and international agencies. (Greenplan Letter p. 2-5). The use of a quantitative approach further allows for the “tailoring” of the standards to meet the community’s needs. (Greenplan Letter p. 6). In other words, a quantitative approach allows the Village to set different standards based upon the location of the noise production “to balance the rights of residents and property owners to use their property in a reasonable manner with the rights of others in the Village to be free of excessive, continuous, unnecessary or disturbing noise.”

The DEC Program Policy notes that the noise levels in residential/non-industrial settings should be lower than in industrial or commercial areas. (DEC Policy p. 14). Thus, a quantitative approach would properly allow the Village to set performance standards for noise impacting residential areas to “[p]reserve and enhance the distinctive character of the Village, which is perceived as peaceful, quiet, scenic, suburban and small town” (1999 Village Comprehensive Plan) while providing flexibility for commercial and industrial uses not impacting residential areas. These limits can be combined with hourly and even seasonal limits.³

The Greenplan letter sets forth several examples of government agency guidance regarding appropriate quantitative measures. The Federal Highway Administration identifies noise levels above 70 decibels as requiring abatement. (Greenplan Letter p. 3). The Department of Housing and Urban Development identifies a sound level of 65 decibels or below as generally acceptable for housing during the day. (Greenplan Letter p. 4). The Environmental Protection Agency recommends noise levels not exceed 55 decibels in order to protect public health and welfare in residences. (Greenplan Letter p. 4). The DEC recommends that in a non-industrial

³ The DEC Program Policy notes that “[s]ummer time noises have the greatest potential for causing annoyance because of open windows, outside activities, etc. . . . building walls and windows that are closed provide a 15 [decibel] reduction in noise levels. Building walls with the windows open allow for only a 5 [decibel] reduction in [sound pressure level].” (DEC Policy p. 10).

setting, noise levels should not be raised “above a maximum of 65” decibels. (Greenplan Letter p. 5). The World Health Organization recommendations, which are based upon scientific and medical studies much more recent than federal agencies, provide that a noise levels from continuous noise in outdoor living areas should not exceed 55 decibels. (Greenplan Letter p. 7). According to the World Health Organization, noise levels of just 70 decibels can cause hearing impairment and loss. (Greenplan Letter p. 2). “There are virtually no situations in which noise levels in the range of 107 to 108 decibels are acceptable in a largely residential community without significant hearing protection and other abatement measures.” (Greenplan Letter p. 3).

Thus, the Greenplan letter recommends a maximum performance standard of 70 decibels but that residential areas, especially those abutting industrial activities, is “cause for much tighter standards.” (Greenplan Letter p. 7). Greenplan recommends that the Village conduct a baseline study to assess the ambient noise levels in various areas of the Village to establish how quiet they should remain. “Then, standards that cannot be exceeded for daytime and nighttime noise levels can be properly developed to protect the health, safety and welfare of residents.” (Greenplan Letter p. 8). Notably, the DEC Program Policy provides that increases in the ambient noise level above 6 decibels requires analysis of the impact on the surrounding land uses and increases greater than 10 decibels deserve consideration of avoidance and mitigation. (DEC Policy p. 13-14).

For the proposed Noise Law to successfully reduce the disturbing and excessive noise in the Village utilizing a nuisance-based approach that identifies specific noise sources instead of performance standards, all sources of such noise must be addressed. However, the proposed Noise Law leaves off significant noise sources. The DEC Program Policy notes that there are “three major categories of noise sources”:

- 1) Fixed equipment or process operations;
- 2) Mobile equipment or process operations; and
- 3) Transport movements of products, raw material or waste.

(DEC Policy p. 2). The proposed Noise Law appears to identify most of the potential noise creators in the first two categories. However, the proposed Noise Law does not address noise from transport movements such as truck traffic, loading and unloading trucks, and movements in and out of facilities, a significant source of noise pollution. (Greenplan Letter p. 1-2). The DEC Program Policy notes that a truck generates noise levels of 91 decibels at 50 feet. (DEC Policy p. 18-19). This is obviously a significant source of disturbing and excessive noise and the absence of any provisions addressing this issue in the proposed Noise Law is a significant oversight.

While the qualitative approach of the Noise Law limits the hours at which detrimental noise can occur and may provide some reduction in the frequency of excessive noise, a quantitative approach will reduce both the level and frequency of such unreasonable noise offering the community greater protection.

IV. The Noise Law treats heavy machinery in a less restrictive manner than outdoor power tools despite its greater likelihood to cause disturbing and excessive noise.

The proposed Noise Law sets forth different requirements for “outdoor power tools and machinery” and heavy machinery, and places greater limits on “outdoor power tools and machinery” even though heavy machinery is a greater noise producer.⁴ Since the proposed Noise Law does not provide any limitations on where “outdoor power tools and machinery” or heavy machinery can be operated, providing greater limits on “outdoor power tools and machinery” is irrational and unreasonable.

For “outdoor power tools and machinery”, the Noise Law requires that “[w]here possible any such tool or equipment shall be properly equipped with a muffler or other properly installed manufacturer-approved noise-reduction device so designed and in such condition as to prevent unnecessary noise and to prevent a public nuisance in its operation.” However, the Noise Law has no similar requirement for heavy machinery. Thus, the Noise Law does not require commercial operators of heavy machinery to use the same degree of care to avoid excess noise, and the consequent impacts, as a resident using a lawn mower or weed trimmer.

Moreover, while the limitations on “outdoor power tools and machinery” apply anytime such equipment emits sound “beyond the property line,” the limitations on heavy machinery only apply where such sound is “audible from a distance of 100 feet or more from the property line.” There is no basis for this distinction. “Outdoor power tools and machinery” like lawn mowers and weed trimmers are common residential equipment, and while their use outside of certain periods is likely to disturb a property owner, they are not atypical and uncommon sounds for an adjoining residential property. However, heavy machinery is not characteristic of a residential area and, therefore, more likely to disturb. The proposed limitation on heavy machinery only when such machinery emits noises more than 100 feet from the property line unreasonably ignores the impact to adjoining landowners even when the noise from such machinery does not

⁴ A typical gas powered lawn mower produces noise at approximately 70 decibels at 100 feet. (Greenplan Letter p. 2). In contrast most heavy machinery identified in the DEC Program Policy significantly exceeds this level. (DEC Policy p. 18).

exceed the 100 feet limit. In contrast, the proposed ordinance places greater limits on the use of common, residential machinery equally likely to be used by an adjoining property owner.

The failure to incorporate equivalent restrictions regarding the implementation of noise suppressing technology and application to noise impacts on adjoining properties is unreasonable. These greater restrictions on “outdoor power tools and machinery” should be incorporated into any limitation on heavy machinery. However, use of a quantitative approach to the noise limits avoids arbitrary and unreasonable distinctions between the types of noise emitting activities. Therefore, even better than incorporating the “outdoor power tools and machinery” limitations would be imposing consistent performance standards applicable to all properties in a zoning district.

V. The minimal penalties do not provide sufficient disincentive to repeated violation.

“[C]reation of effective enforcement provisions, including sufficiently punitive penalties for violations will be key to an effective Noise Law in Upper Nyack.” (Greenplan Letter p. 9). The proposed Noise Law provides penalties of just \$250 for a first offense and \$500 for each subsequent offense. These penalties may provide disincentive for repeat violations relating to the activities governed in sections 3(A), (B), (C)(i) and (C)(ii). However, for the activities in section 3(C)(iii) and (D), such penalties are unlikely to present a significant deterrent. (Greenplan p. 9). Instead, these penalties risk becoming a mere “cost of doing business” for heavy machinery operators and restaurant owners.

In contrast to the proposed Noise Law, the Town of Clarkston’s noise ordinance establishes far more significant penalties that provide a substantial deterrent to repeat violators. *See* Town of Clarkston Code § 205-7. A first offense of the Town of Clarkston’s noise ordinance is punishable by a fine up to \$2,500, 10x the Village’s proposed penalties. For each repeated offense within an 18-month period the maximum penalty increases substantially to a maximum penalty of \$10,000 to \$15,000. The Clarkston ordinance also provides that “[e]ach day’s continued violation, when charged separately or listed as a separate count in any accusatory instrument, shall constitute a separate violation.” These significant penalties provide far greater deterrence than the Village’s proposed penalties.

Moreover, the penalties proposed in the Noise Law provide little incentive and justification for the Village to pursue violations, especially when doing so is likely to result in opposition and potential litigation. More significant and substantial penalties justify greater efforts at enforcement even when the violator is likely to challenge the penalty in court. Thus, the current penalties in the proposed Noise Law, leave the Noise Law toothless and, therefore, unlikely to achieve its goal of addressing excessive noise in the Village.

Conclusion

GEA urges the Village to consider these comments in reviewing the Noise Law and incorporate these suggestions into a final Noise Law so as to create an ordinance more likely to protect the health, safety and welfare of the residents of the Village of Upper Nyack and effectuate the goal of creating a Village “free of excessive, continuous, unnecessary or disturbing noise.”

We ask that these comments and the submissions contained herewith are incorporated into and made part of the public hearing record. We also request the opportunity to provide further remarks based upon any new information or updated drafts.

Thank you for your time and attention to this matter.

Respectfully submitted.

A handwritten signature in cursive script, appearing to read "Meave M. Tooher".

Meave M. Tooher

Cc: Noelle Wolfsen, Esq. (via email)
Carol Brotherhood Village Clerk (via email)

GREENPLAN

Wednesday, April 14, 2021

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Re.: *Proposed Upper Nyack Local Law 5 of 2021*
Noise Law of the Village of Upper Nyack
Review and Comments on Noise Control Rules

Dear Ms. Tooher:

You have asked that I review and provide comments on the Village of Upper Nyack's proposed Noise Local Law. I am in receipt of Local Law 5 of 2021, which has been identified based upon a Microsoft Word filename at the end of the document with a "V.1" and a date of "1-18-2021" in the filename. I assume that this version of the proposed Local Law is the first one to be released for public comment and that it was released on January 18, 2021. This letter will provide my comments and recommendations on the proposed Noise Law.

The comments provided in this letter are based upon my expertise as a professional planner working in New York State for more than 40 years. My firm represents municipal and private clients, as well as non-profit agencies. GREENPLAN has provided planning services to 56 government entities including 33 towns, 12 villages, two cities, five county agencies, two school districts, and two State of New York agencies. I have been a Professor of Land Use Planning at Bard College's Graduate School of Environmental Studies and am currently an Adjunct Professor teaching three different courses with the Marist College School of Science's Department of Environmental Science and Policy. I train and assist municipal boards in their environmental and land use responsibilities under New York State Town, Village and General City Law, and other applicable federal, state and local rules and regulations that affect land use, including noise. Importantly, I am regularly called upon to prepare or review municipal comprehensive plans, zoning laws, and other local land use controls.

I will begin first with some general comments on the type of noise control law being proposed, some limitations of this method of controlling noise in the community, and my recommendations for taking a more rigorous approach to controlling noise in Upper Nyack. Second, I will provide some commentary on the specifics of the Village's proposed approach and offer my suggestions for ensuring the proposed Local Law is as simple, clear, and precise as possible and is based upon the most recent science of noise impacts on human health and the environment.

General Comments

Acoustics experts commonly define noise as unwanted or harmful outdoor sound created by human activities. Noise pollution is a term that refers to sounds in the environment that have the potential to threaten the health, safety and welfare of residents. There are potentially many sources of noise pollution

that include motor vehicles, motorized equipment and tools, industrial machinery, aircraft, and loud music to name a few. It is because of the adverse health effects of noise pollution that hundreds of communities in the US alone have enacted rules to control its worst effects. According to the World Health Organization (WHO): “In recent years, evidence has accumulated regarding the health effects of environmental noise. For example, well-designed, powerful epidemiological studies have found cardiovascular diseases to be consistently associated with exposure to environmental noise.” [WHO, 2011, [Burden of disease from environmental noise](#)].

Noise control in a community can take many forms from a very basic nuisance based approach, like Upper Nyack’s proposed Noise Law, to a detailed performance based approach that uses equipment for measuring noise levels and solid science-based thresholds that anyone can understand. Noise control in a community is an important planning issue with serious health consequences for everyone. Based upon what medical research has shown, noise pollution:

- Can be a significant source of hearing impairment and hearing loss
- Can interfere with speech communication
- Disturbs rest and sleep needed for individuals to remain healthy
- Can have a negative effect on residential behaviors and annoyance
- Can cause physiological (for example blood pressure and heart rate), mental-health, and performance effects
- Can interfere with intended activities and adversely affect performance of cognitive tasks such as reading, problem solving, and memorization.

According to the World Health Organization (WHO),¹ hearing impairment or loss can occur at decibel levels of about 70. This decibel level is the equivalent to what a person would be subjected to if they were about 100 feet from the noise made by a typical gas powered lawn mower. Although anyone can be impacted by noise, vulnerable members of the general population are at increased risk and must also be considered in noise regulation because of their special needs, regardless of whether the need is temporary or permanent. These groups include the elderly; young children; persons with existing diseases or medical problems; persons dealing with complex cognitive tasks (for example, learning to read or preparing for an exam); and persons who have sight, hearing, or learning impairments. Because people in these groups may be less able to cope with noise exposure, they may be at higher risk for the health effects noted above. The presence of such groups in a community provides even greater justification for regulation of avoidable sources of noise, based upon its known health consequences above specific decibel levels.

The Village is on record for addressing the negative effects of noise through its comprehensive planning processes. The 1999 [Village Plan](#) states at “Planning Goal A” to: “*Preserve and enhance the distinctive character of the Village, which is perceived as peaceful, quiet, scenic, suburban and small town.*” This is a great goal to work towards for a small suburban village. For the Village’s 2020 Plan update document (October 30, 2020 version), there are several policies that address noise. Section 6 has four separate references to establishing performance standards for noise found on pages 6-5, 6-10, and 6-12. Then in Section 12, Quality of Life and Community Character, the policies become even more specific with recommendations to “*Establish acceptable levels of noise for residential areas and for commercial/business areas that abut residential areas,*” and to

¹ World Health Organization (WHO). 2018, [Environmental Noise Guidelines for the European Region](#). Retrieved from <https://www.euro.who.int/en/health-topics/environment-and-health/noise/environmental-noise-guidelines-for-the-european-region> and World Health Organization (WHO). 1999, [Guidelines for Community Noise](#) retrieved from <https://www.who.int/docstore/peh/noise/Comnoise-1.pdf>

“Establish hours of operation for noise-generating operations or activities that impact residential areas.” [see page 12-6]. These are all great policies for addressing the negative effects of noise, especially the health impacts associated with noise pollution in a community.

My analysis of the proposed Village Noise Law however, has identified a disconnect between the Village policies and the current proposed regulatory approach to address the quality of life and community character concerns expressed on page 12-5 of the Comprehensive Plan. The Legislative Intent of the proposed Noise Law expresses the existing conditions of “unreasonable disturbing or excessive noise within Upper Nyack is a condition that has persisted, and the level and frequency of occurrences of such noises continues to increase.” Indeed, a Noise Study Data Report: Goosetown Environmental Action, Upper Nyack, New York performed by Montrose Environmental of Pine Brook, NJ i studied existing noise levels in the vicinity of 6 Van Houten Street. Sound level readings were taken beginning in October 2018 through April 2019. The readings on Van Houten Street consistently surpassed the 70 decibel standard for health effects and in some cases significantly surpassed such standards by a large margin with readings as high as 107.1 decibels and 108 decibels. This is certainly cause for concern and demonstrates that rigorous noise control rules are needed in the Village. The latter measured noise levels for a person experiencing them equate to a jet flyover at a 1,000 foot distance or to standing in front of a rock concert band 15 feet away.

Both New York State and the Federal government established standards that have been in place to protect public health for decades now. There are virtually no situations in which noise levels in the range of 107 to 108 decibels are acceptable in a largely residential community without significant hearing protection and other abatement measures. Indeed, the Federal Highway Administration (FHWA) regulations require abatement to be in place for different activities as shown by the thresholds below [see FHWA June 12, 1995

Table 1 - Noise Abatement Criteria

TABLE 1 - Noise Abatement Criteria			
Activity Category	Leq(h) ¹	L10 (h) ¹	Description of Activity Category
A	57 (Exterior)	60 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to
B	67 (Exterior)	70 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (Exterior)	75 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above (e.g., commercial, industrial, other).
D	--	--	Undeveloped lands.
E	52 (Interior)	55 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, auditoriums, offices, etc.

Source: Federal-Aid Highway Program Manual, Transmittal 348, August 9, 1982. 1 Hourly A - Weighted Sound level - decibels (dBA)

²Either Leq(h) or L10(h) (but not both) may be used on a project.

directive (Procedures for Abatement of Highway Traffic and Construction Noise) found in 23 CFR 772 and the FHWA Policy and Guidance document dated June 1995].

The above shows just one measure used by one Federal agency to control noise. Other agencies with established noise rules include the US Department of Housing and Urban Development (HUD), the Environmental Protection Agency (EPA), the Federal Aviation Administration (FAA), the Occupational Safety and Health Administration (OSHA), and others. HUD considers an average sound level of below 65 decibels as generally acceptable for housing during the day and 45 decibels for night. The point here is that specific measurable standards in use by federal agencies are the first line of defense for controlling noise pollution. Doing so in a nuisance-based approach like Upper Nyack, however may not lead to significant reductions in noise levels within the Village, as recognized and recommended in the Village Comprehensive Plan.

In 1974, the EPA prepared a Model Community Noise Control Ordinance in response to the Federal Noise Control Act of 1972 [see 49 U.S.C. §§ 4901 *et seq.*]. According to the EPA's 1974 Model Ordinance: "*Many existing community noise ordinances are based on outmoded model ordinances and/or the common law approach to noise control which relies exclusively on difficult to enforce nuisance provisions. While the model ordinance preserved common law with Article VI provisions prohibiting noise disturbances, it also contains definitive performance standards for motor vehicles and other sources of community noise. The increase in reliable monitoring equipment available to local governments, coupled with definitive standards incorporated into local noise control ordinances, should result in ordinances which are more easily enforceable than may have been in the past.*" [see page 1 of EPA Model Ordinance].

Further, guidance from the New York State Department of Environmental Conservation (DEC) also provides some clarity on what constitutes a noise impact. In the DEC's Program Policy document entitled Assessing and Mitigating Noise Impacts (February 2, 2001), the thresholds for significant noise impacts (i.e. over ambient sound levels) are summarized as follows [see pages 13 and 14 in the DEC policy document]:

Noise Threshold	Noise Impact
0-3 decibel increase	Should have no appreciable effect on receptors
3-6 decibel increase	May have potential for adverse noise impact only in cases where the most sensitive of receptors are present
> 6 decibel increase	May require a closer analysis of impact potential depending on existing sound pressure levels (decibels) and the character of surrounding land use and receptors
10 decibel increase	Deserves consideration of avoidance and mitigation measures in most cases

The DEC has published the above guidance for use by its staff in issuing permits and for local agencies and members of the public to rely upon. The State considers the above threshold increases in noise as indicators of impact potential for specific circumstances one may encounter. The DEC's guidance also relies on the EPA's Office of Noise Abatement & Control's publication entitled Protective Noise Levels (EPA 550/9-79-100, November 1978). An excerpt from this EPA publication can be found below. In it, the EPA advises that noise levels should not exceed 55 decibels in order to protect public health and welfare for sensitive areas like residences.

Table VIII
Yearly L_{dn} Values That Protect Public Health and Welfare with a Margin of Safety

EFFECT	LEVEL	AREA
Hearing	$L_{eq(24)} \leq 70$ dB	All areas (at the ear)
Outdoor activity interference and annoyance	$L_{dn} \leq 55$ dB	Outdoors in residential areas and farms and other outdoor areas where people spend widely varying amounts of time and other places in which quiet is a basis for use.
	$L_{eq(24)} \leq 55$ dB	Outdoor areas where people spend limited amounts of time, such as school yards, playgrounds, etc.
Indoor activity interference and annoyance	$L_{dn} \leq 45$ dB	Indoor residential areas
	$L_{eq(24)} \leq 45$ dB	Other indoor areas with human activities such as schools, etc.

Outdoor yearly levels on the L_{dn} scale are sufficient to protect public health and welfare if they do not exceed 55 dB in sensitive areas (residences, schools, and hospitals). Inside buildings, yearly levels on the L_{dn} scale are sufficient to protect public health and welfare if they do not exceed 45 dB. Maintaining 55 L_{dn} outdoors should ensure adequate protection for indoor living. To protect against hearing damage, one's 24-hour noise exposure at the ear should not exceed 70 dB.

In addition to the EPA's recommendations, the DEC's Assessing and Mitigating Noise Impacts document also addresses maximum decibel levels in a community as follows:

"Most humans find a sound level of 60 - 70 dB(A) as beginning to create a condition of significant noise effect (EPA 550/9-79-100, November 1978)...In non-industrial settings the SPL should probably not exceed ambient noise by more than 6 dB(A) at the receptor. An increase of 6 dB(A) may cause complaints. There may be occasions where an increase in SPLs of greater than 6 dB(A) might be acceptable. The addition of any noise source, in a non-industrial setting, should not raise the ambient noise level above a maximum of 65 dB(A). This would be considered the "upper end" limit since 65 dB(A) allows for undisturbed speech at a distance of approximately three feet. Some outdoor activities can be conducted at a SPL of 65 dB(A). Still lower ambient noise levels may be necessary if there are sensitive receptors nearby." [see DEC Policy Assessing and Mitigating Noise Impacts].

Upper Nyack's proposed Noise Law prohibits certain activities or restricts activities to certain hours of the day, based upon their nuisance characteristics. This is considered a qualitative approach to noise regulation because it prohibits noise by its character or nature, and restricts some activities to certain hours of the day. However, this qualitative approach taken in the Noise Law allows specific noise pollution to occur, regardless of its intensity and potential for health impacts, even if it can be considered "excessive" or "disturbing." Regulation of significant noise pollution in this case allows offensive noise but specifies a time "break" in its duration. In the proposed Noise Law, during any three and a half hour period, such excessive or disturbing noise levels would occur for 86 percent of the period with just 14 percent of the period remaining quiet. This method would not stop noise pollution and its health impacts but gives license to create it.

This type of regulation is subjective in nature because it relies on "plainly audible" noise or noise "which can be heard anywhere beyond the property line of the property," or noise that comes from "engine powered" equipment that "emits continuous sounds, audible from a distance of 100 feet or more from the property line of the property on which the work is occurring..." There is no quantitative standard for such noise but the qualitative measure to be used is for every three hours of operation of such "continuous sounds, there must be a cessation for a period of 30 minutes."

In my professional opinion, this is unacceptable because it ignores the damage to hearing and other medical impacts to residents' who are subjected to it and that can result in disruptions to the Village's quality of life as a result of allowing such noise to go on for up to three hours in the first place. Further, it is not

consistent with the Legislative Intent articulated in Section 2 which states the: “Village [to] be free of excessive, continuous, unnecessary or disturbing noise” nor with the Village’s Comprehensive Plan, which includes specific policies to establish performance standards like a decibel limit on activities. Courts look to legislative intent to determine whether to uphold the imposition of new regulations if challenged.

Enforcement will be an issue for those who are charged with enforcing the provisions of the Noise Law. The excessive time frames associated with certain activities such as “*Work Involving Use of Heavy Machinery*” [see Noise Law Section 3.D.iii] in particular will require the presence of an enforcement agent to be on a receptor site for periods of at least three and one half hours each time they are investigating a potential violation. This will create a burden on Village code officials as well as Town Police employees and will divert them from performing other needed duties in the Village. Noises coming from any sites within the Village where heavy machinery is used and “*that emits continuous sounds, audible from a distance of 100 feet...*” is vague and poses an enforcement dilemma that will be subject to the discretion of the enforcement parties. Importantly, how is “*continuous*” defined? It is not and this will be open to interpretation. Numerous machines in such situations can be turned on and off over time, the noise generated from them may or may not be cumulative with other machines, and how does one even establish noise as “*continuous sounds*” in view of the intermittent nature of machinery such as that described in Section 3.D.iii of the Noise Law?

The fatal flaws I see with the above qualitative approach to noise regulation being pursued by the Village is that first, the nuisance-based approach is unlikely to lead to significant reductions in noise levels in the Village. Second, the Village Comprehensive Plan recommends establishing a performance-based (quantitative) approach to noise regulation. This clear recommendation is not being addressed by the Noise Law. The Village Plan is clear that quantitative measures should be used to control unwanted noise in the Village. Third is that for certain sounds, like that generated by heavy machinery, noise will exceed safe levels that are known to prevent loss of hearing and other health impacts as described above and as recommended by scientific standards used to prevent such impacts. Vulnerable populations in the Village may be at an increased risk of health consequences as a result of the lack of better enforceable controls on noise pollution in the Village.

General Recommendations

A more effective, well-established, and scientifically based approach to regulating noise is the quantitative regulation. In my experience, Most noise regulations adopted today by communities use the quantitative approach rather than the qualitative approach. This is because of their proven enforceability as well as their medical and science-based standards. A quantitative rule proscribes noise-producing conduct by a performance standard, applying a scientific basis for sound intensity and frequency. The quantitative approach provides non-discretionary, objective and predictable standards. Quantitative standards are more amendable to tailoring in order to meet the specific, unique needs of the community. The rules can even specify varying decibel levels for different areas of the community, such as industrial or manufacturing areas different from predominantly residential areas where there is an expectation of “domestic tranquility.”

The Village Board is already aware that noise is an issue in the community. However, my concern is that the qualitative approach being considered by the Village will not reduce overall noise levels but will merely provide a time when they cannot occur by somehow allowing for a short break in the times when loud noises can be produced, thereby ignoring the overall health impacts of loud noise on Village residents. The approach most often favored by noise professionals is the quantitative approach, because it relies on maximum noise standards that are in common agreement by noise experts and health professionals because

such standards can be measured, defended in enforcement actions, and they avoid the vagueness that can lead to court decisions where courts are unable to determine with any reasonable degree of certainty, the intent of the legislative board. Organizations such as the WHO, EPA, HUD, FHWA, OSHA, and others have well established noise level thresholds for avoiding noise pollution that is designed to prevent health impacts such as hearing loss, sleep disturbance, annoyance and speech interference, among many other purposes.

Establishing quantitative standards will require an investment in time, money and continuing training. But these costs are outweighed by the clarity, enforceability, and defensibility of a quantitative approach. In general, standards should be based upon the results of the numerous studies in laboratories and field surveys of the issue, all based upon “sound” science.

The WHO’s recommended noise levels can be summed up as follows:

- To protect the majority of people from being moderately annoyed, noise levels should not exceed 50 decibels during the day
- To protect the majority of people from being seriously annoyed during the day, the noise levels from continuous noise in outdoor living areas should not exceed 55 decibels
- At night, outdoor noise levels should not exceed 45 decibels, so that a recommended level of 30 decibels inside bedrooms for continuous noise can be met with windows open

It should be noted that the WHO’s recommended standards are subject to the latest scientific and medical studies of the relationship between noise and health impacts. The Federal government essentially shut down its noise program at the EPA in the 1980’s and so many of the United States’ standards are now considered out of date by most health professionals and are not currently aligned with the latest health studies of noise pollution.

Specific Recommendations

I commend the Village Board for taking the first step to noise regulation in the Village by developing the proposed Noise Law. My recommendation would be to give further consideration to establishing specific clearly defined standards that can be measured and enforced or to use a combination of qualitative and quantitative approaches. Good noise control regulations will provide a fair warning to potential violators that unacceptable noise in the community has consequences. It would also avoid the potential for charges of arbitrary enforcement. Some use of numerical provisions, such as combining the timing provisions that are already in the proposed Noise Law with measurable and defensible standards that address noise level violations would accomplish both purposes.

Some specific recommendations include the following:

- Combining a qualitative nuisance based approach, such as using the sections of the Noise Law that have already been prepared, with a quantitative approach should be considered. Based upon the potential for hearing damage and other health impacts of noise pollution that exceeds 70 decibels would be a good starting point for establishing a level of noise that should not be exceeded anywhere in the Village. While 70 decibels may be a reasonable and appropriate upper limit for noise in general, there may be technical and economic reasons to choose lower sound levels that along with recent medical advice. For instance, the close proximity of industrial uses to sensitive residential uses may be cause for much tighter standards than a 70 decibel limit.

- In Sections 1, 2, and 3, use of the word “unnecessary” should be reconsidered. It implies that a listener is capable of deciding whether a noise is or is not necessary. However, “excessive” and “disturbing” are good descriptors used here.
- In Section 2, Legislative Intent, I suggest that the well-studied and documented adverse health effects of noise (such as hearing loss, hearing impediments, interference with speech and sleep, physiological, mental-health, and performance effects, etc.) be expanded far beyond a simple statement that noise is a “*detriment to the public health.*” Such statements should be included as a basis of the Noise Law and the legislative intent would be to address these public health impacts. It may be easier to convince a court that there are well defined scientific and medical reasons for enacting the law if challenged.
- A section defining terms may be helpful in creating clear regulations. Some terms that would benefit from a definition that go beyond a common dictionary definition could include:
 - ▶ “Continuous” has specific implications for sound professionals as a measurable sound standard and should be defined with the help of an expert on noise
 - ▶ “Disturbing noise” can be defined as: sound or vibration which may disturb or annoy reasonable persons of normal sensitivities or causes, or tends to cause an adverse effect on the public health and welfare, or endangers or injures people, or endangers or injures personal or real property
 - ▶ “Plainly audible” is any sound for which information content is unambiguously communicated to the listener, such as, but not limited to, understandable speech, comprehension of whether a voice is raised or normal, repetitive bass sounds, or comprehension of musical rhythms, without the aid of any listening device
- In Section 3, the references to “*leaf blowers*” and “*outdoor power tools and machinery*” refers to “*audible sound*” but lacks any distance requirements like “*heavy machinery*” (100 feet) and “*restaurants*” (300 feet). Dogs refer simply to “*anywhere beyond the property line...*” These may be deemed to be vague and unenforceable unless a standard is included. Distances should be reasonable and defensible.
- The references to the days and times of the day when specific sound producing devices are permitted or prohibited is unnecessarily complex and will be difficult for those generating noise, neighbors who are subjected to noise, and those enforcing the Noise Law provisions to keep track of. This will no doubt create confusion. In general, tolerance for noise diminishes as the day progresses.
- If the Village Board is open to adding a performance based approach to regulating noise pollution, the 70 decibel standard discussed above may or may not be low enough to protect Village residents from the worst health effects of loud noise. A baseline study that assesses ambient noise levels throughout the Village would be a good starting point to determine just how quiet a typical neighborhood is and therefore how quiet it should remain. Then, standards that cannot be exceeded for daytime and nighttime noise levels can be properly developed to protect the health, safety and welfare of residents.

Noise control in a community is based on a combination of both regulations and enforcement. The question is not what standards are in the noise regulation but what part of the noise regulations do the enforcement authorities rely on when they are in the field and why, so that a violation can be defended before a judge. This is a crucial part of noise control. Creation of unambiguous standards that any “reasonable person” can judge unreasonable noise is less likely to be struck down as unconstitutionally vague and unenforceable.

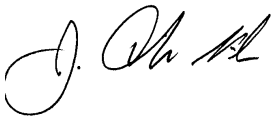
Finally, creation of effective enforcement provisions, including sufficiently punitive penalties for violations will be key to an effective Noise Law in Upper Nyack. The current penalties for violations may be insufficient to deter noise offenders. The Village Board should consider what the EPA recommends in its Model Noise Control Ordinance and what many other municipalities do in this case. Start with a discretionary policy of issuing an abatement order for a first violation, followed by a citation for the original violation if the abatement order is not complied with. This approach would be used for violations that are presumed to be unintentional, which could lead to compliance by law-abiding citizens following the abatement order. The abatement order should include things like the types of violations for which an order may be issued and the maximum time period of an order.

Violations at a proposed \$250 fine for a first violation and \$500 for subsequent violations in the Noise Law in my professional opinion, are insufficient to deter the activity of creating noise pollution. Municipalities I am familiar with have established, in some cases, significantly larger fines or imprisonment or both for convictions. Repeated violations, such as second and third offenses, are subject to increasing monetary fines, coupled with the threat of imprisonment. For instance, the Town of Clarkstown's Noise Law [Chapter 205 of the Town Code] imposes a fine of up to \$2,500 or imprisonment or both for a first violation of its noise rules. A third violation of Clarkstown's noise rules could result in a fine of up to \$15,000, imprisonment, or both upon conviction. In addition, some communities treat violations as misdemeanors, rather than infractions, which is an even greater deterrent.

If Upper Nyack is serious about preventing noise pollution, then serious consideration should be given to including a performance based approach in its Noise Law. Upper Nyack should also consider an investment in the equipment and training that will be needed to properly enforce its new rules, whether the Village remains committed to a nuisance based approach as proposed or is open to using performance standards, which will be far easier to enforce and defend. Upping the penalties for violations can pay off because potential violators will be less apt to violate them in the first place.

In order to prepare noise controls using performance standards, it is important to consult with experts in acoustics and to involve those in enforcement, so they can use their expertise in court. However, noise control will only be successful if it contains provisions that are important to the community. The absence of standards that can be used to control unwanted noise may result in rules that will make no one happy. I thank you for your consideration of the above comments.

Very Truly Yours,

A handwritten signature in black ink, appearing to read "J. Theodore Fink". The signature is fluid and cursive, with a large initial "J" and a stylized "F".

J. Theodore Fink, AICP
President

J. Theodore Fink, AICP | Curriculum Vitae

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DEGREES

Master of Urban Planning and Policy. University of Illinois at Chicago. Masters Project entitled "Grant Park Tomorrow" funded by the National Endowment for the Arts and the Illinois Humanities Council (see citations below).

Bachelor of Arts in Environmental Design. University at Buffalo, SUNY.

ACADEMIC EXPERIENCE

Marist College School of Science, Poughkeepsie, New York. Adjunct Instructor of three courses: Introduction to Environmental Issues (ENSC 101), Environmental Explorations of the Hudson (HONR 370/375), and Principles of Environmental Assessment (ENSC 380). Beginning with ENSC 101 in 2014, teaches natural systems, adverse impacts of human activities upon these systems, and how society deals with the impacts. Sustainability is emphasized, since a goal of environmental science is to sustain natural resources, essentially forever. Topics include land use; ecology; biodiversity; human population growth; food production; energy resources; and water and air pollution. In addition to the scientific issues, related politics, economics, and ethics topics are covered. Through lectures, case studies, readings, documentaries, discussions, ethical dilemmas, group projects, and field trips, students develop an interdisciplinary foundation for understanding how natural systems influence and are shaped by human activities. The Honors course focuses on the Hudson River Valley National Heritage Area, using Marist's research boat as an extended classroom. Students in this course gain a new appreciation of the natural processes that have shaped the River, see first hand how humans impact and manage those processes, and in turn students learn to become stewards of the environment. Environmental Assessment is focused on the substance and procedures of the National Environmental Policy Act (NEPA) and the New York State Environmental Quality Review Act (SEQR).

Bard College Graduate School of Environmental Studies, Annandale-on-Hudson, New York. Professor of Land Use Planning. In the mid-1990's, taught basic principles and practical applications of environmentally sensitive land use planning for individual properties, municipalities, and regions. The course provided the tools necessary to perform a site analysis, constraint mapping, natural and cultural resource inventories, land conservation/open space planning, analysis of land use controls, and the economics of development and preservation.

State University of New York College at New Paltz, Continuing Education Program. Advanced Open Water Diving Instructor, 1982-1985. Taught SCUBA diving in a training program that combined formal classroom study with practical experience. Trained students in the safe operation of equipment and lectured on the physiological affects of the underwater environment as well as how divers effect the delicate ecology of surface waters. A step by step approach was used to train students beginning with exercises in a pool and then advancing to

a series of dives in open water settings. At the successful completion of the course of study, students were then “certified” to SCUBA dive throughout the world.

Center for Urban Studies, University of Illinois at Chicago. Teaching and Research Assistant. In the mid-1970’s, assisted the United States Department of Housing and Urban Development with the preparation of an environmental impact statement for a major urban redevelopment project. Devised population projections for the Chicago Regional Hospital Study. Compiled and interpreted population, housing, land use, and economic statistics in support of Center publications. Assisted the Little Village Industrial Association with preparation of a plan for the future of the residential and industrial community.

NON-ACADEMIC INSTRUCTIONAL EXPERIENCE

Low Impact Development Forum - Aquifer and Stream Corridor Protection. Dutchess County Planning Federation and Cornell Cooperative Extension of Dutchess County. Training Instructor for Stream Corridor Protection Planning. Fall 2019.

Municipal Law and Planning: A Local Perspective on Hydrofracking. Albany Law School, The Government Law Center. Speaker on Effective Local Planning Tools, September 2012.

Conservation Design. Trainer for an alternative design approach to conventional development in numerous municipalities throughout the Hudson Valley since 2001.

Conservation Development. Trainer for the Teatown Reservation’s Environmental Leaders Learning Alliance (ELLA) program. ELLA involves 31 town and village Conservation Advisory Councils, Conservation Boards, and Open Space Committees from northern Westchester, Putnam, and parts of Dutchess, Orange and Rockland counties in New York State.

Growth Centers. Speaker, Land Use Leadership Alliance Training Program, Pace University School of Law, 2004.

Smart Growth Success in the Hudson Valley: Implementation in Warwick. Speaker, Hudson Valley Smart Growth Alliance Conference, November 2002.

Elements of Site Plan Review, Speaker, New York Planning Federation 2000 Annual Conference, October 2000.

Planning for the Future, Speaker, Wappingers Falls Business and Professional Association, March 1999.

Rural Character and Rural Quality: Are They Worth Preserving? Speaker and Panelist, Town of Warwick Master Plan Committee, November 1994.

New York Updates Its Planning and Zoning Laws. Various Municipal Planning Boards, October 1994 through present.

The Basics of SEQR. Town and Village Boards, Town and Village Planning Boards, June 1993 through present.

SEQR’s Role in Municipal Land Use Planning. Municipal Planning Boards, April 1993 through present.

PLANNING CAPABILITIES

Progressively responsible community and regional land use planning advice to government and private parties. Organizes and conducts collaborative planning to engage residents with local officials by helping each understand and visualize the implications of sustainable development. Lectured at conferences, colleges and universities, and in local training programs on sustainable development techniques. Promoted a variety of innovative planning tools, aimed at conservation of natural and cultural resources, with proven results. Successfully secured government and other funding for implementing planning, zoning and waterfront revitalization projects. Honed communication skills to achieve successful planning outcomes. Prepared comprehensive plans, open space plans, scenic protection plans, farmland protection plans, waterfront revitalization plans, and a wide range of zoning and other specialized land use controls to implement such plans. Expert witness for court cases and amicus briefs.

PLANNING EXPERIENCE

GREENPLAN Inc., Rhinebeck, New York. Founder and President. Since 1991, provides planning services to a variety of clients including villages, cities, and towns as well as counties and state government agencies, attorneys, engineers, architects, planners, landscape architects, private developers, not-for-profits and educational institutions. Prepared illustrated form-based zoning for a number of NY municipalities. Created unique land use controls to protect biodiversity. Advanced conservation development practices and other sustainable development techniques. Promoted a variety of innovative planning tools for implementation of Hudson River Valley Greenway Communities Council approved Greenway Compact and Greenway Program policies. Prepared comprehensive plans, open space plans, scenic protection plans, community preservation plans, farmland protection plans, waterfront revitalization plans, and a wide range of zoning and specialized land use controls to implement such plans. Collaborated with committees, legislative boards, administrative boards, attorneys, and other consultants to achieve adoption and implementation of a wide variety of plans and land use controls.

EnviroPlan Associates, Inc., Poughkeepsie, New York. President. In the late 1980's, directed all planning and environmental services for this multi-disciplinary consulting firm. Supervised the preparation and/or review of several hundred environmental impact assessment studies. Supervised planning, scientific, and legal staff.

Quality Environmental Planning Corporation, Pleasantville, New York. Vice President. In the mid-1980's, directed all planning functions for the Westchester County office of a multi-state planning, landscape architecture and engineering firm. Prepared or supervised the preparation of concise environmental impact statements. Processed, in a timely manner, federal, state and local land use permits. Directed a study of the environmental quality of Little Neck peninsula in the Town of Huntington, Long Island. Developed proposed boundaries and completed a boundary justification report and Draft EIS for the Nissequogue State Scenic and Recreational River in the Town of Smithtown, Long Island. Analyzed and assessed local and state significant viewsheds. Prepared amendments to municipal planning and zoning documents. Delineated freshwater wetlands pursuant to Article 24 of the New York State Environmental Conservation Law. Supervised planning staff.

New York State Department of Environmental Conservation (DEC), New Paltz, New York.

Associate Planner. In the early 1980's, principal staff assigned to planning the Upper Delaware National Scenic and Recreational River corridor. Assisted the National Park Service in developing a River Management Plan and Draft Environmental Impact Statement. Prepared and presented technical papers on land and water use issues and policies. Identified and evaluated significant land and water resource values for protection. Evaluated state and local laws, ordinances, and plans for their effectiveness in protecting resource values and recommended appropriate actions. Provided responsive communication with local officials, landowners, and citizens in representing the Department and other State programs operative in the River Valley. Analyzed and prepared accurate maps, statistics, and other materials in conjunction with Plan and EIS development. Conducted field investigations, reviewed EISs for proposed developments within the River Valley, and evaluated the impacts of proposed developments.

Program Administrator for the Department's River Conservation Program in Southeastern New York State. Assisted citizen's advisory groups in developing multi-disciplinary studies of potential Wild and Scenic Rivers and adjacent lands. Analyzed eligibility of rivers and evaluated proposed designation and its environmental, social, and economic impacts. Prepared Departmental reports recommending action to designate rivers as Wild, Scenic, and Recreational by the governor and legislature. Provided program assistance to the Long Island Regional Office. Provided program support to the Heritage Task Force for the Hudson River Valley. Facilitated public participation to ensure the Program's success. Assisted in the Departmental review of the Marcy South high voltage electric transmission project. Supervised interns on various projects.

Prepared a public access development plan for the Hudson River from the Troy dam to the Yonkers/New Jersey boundaries. Identified existing public and private access sites. Evaluated site potential for expansion and improvement. Determined future access needs for the Hudson River. Conducted administrative and field surveys of suitable access sites and evaluated their potential for development. Provided recommended sites for public access in a final report.

Open Lands Project, a private non-profit organization, Chicago, Illinois. Project Manager. In the late 1970's, directed an innovative research project to evaluate the historic significance, present status and future use of Grant Park, a 320-acre lakefront park, often referred to as Chicago's "front yard." Developed a master plan for restoration of an 1840's pioneer homestead as a living history farm and agricultural museum. Editor of Terrain, a bimonthly newsletter presenting informative articles on open space issues. Produced effective grant proposals that successfully led to an expansion of the organization's programs. Assisted civic and community groups in developing financial, organizational, and planning strategies for the preservation of open space. Provided technical assistance on open space preservation to local, regional, and state agencies. Created policy statements and presented expert testimony at hearings. Commented on local, regional, and state plans affecting open space and recreation. Contributed to projects of CorLands, a land acquisition affiliate of Open Lands Project. Lectured and presented slide shows at civic and community group meetings on the values of open space preservation. Supervised staff and student interns on various projects.

Erie County Department of Environmental Quality, Buffalo, New York, Planning Intern. In the mid-1970's, established a review procedure for conducting environmental impact assessments of capital construction projects of the County.

SPECIALIZED TRAINING

Community Leadership Alliance (CLA), Pace University Land Use Law Center and the Glynwood Center.

Development Impact Fees, American Institute of Certified Planners (AICP).

River Conservation and Revitalization, United States Department of the Interior, National Park Service.

Landscape Design, Cary Institute of Ecosystem Studies.

Greenway Planning, United States Department of the Interior, National Park Service.

Master Instructor, Scuba Schools International.

CLIENTS SERVED SINCE 1991

NY State Department of Environmental Conservation, Dutchess County, Tompkins County and 56 municipalities (cities, towns and villages) in New York State, professionals, not-for-profit organizations and private for-profit entities.

ACCOMPLISHMENTS

- ▶ Member, American Institute of Certified Planners (AICP). The AICP establishes qualifications for membership, maintains examination procedures for this purpose, and requires annual certification maintenance.
- ▶ The Town of Warwick was awarded the New York State Association of Realtor's first annual "Smart Growth Award" for its planning program, including a Comprehensive Plan, Zoning Law and other planning efforts. Ted Fink has been Town Planner in Warwick since 1991 and developed the award winning planning and zoning documents for the Town Board.
- ▶ In November of 2017, the Town of Warwick became only the second municipality in New York State (after New York City) to achieve the SolSmart Gold Designation by the US Department of Energy. The Designation was achieved, in part, through a Solar Local Law amendment to the Town Zoning Law, prepared by Ted Fink.
- ▶ The American Farmland Trust uses Warwick's Comprehensive Plan, Zoning Law, Transfer/Purchase of Development Rights and other preservation programs as models for farmland protection.
- ▶ Warwick's planning and zoning documents have been cited as the model of a smart growth strategy in publications of the Glynwood Center, New York State Association of Towns, Institute of Local Self-Reliance New Rules Project, and the Smart Growth Network.
- ▶ The Harvard Environmental Law Review used Warwick as an example of an "innovative land use law...[and a] successful approach...to emulate and encourage..."

- ▶ The American Planning Association's flagship publication, Planning magazine, highlighted Warwick's planning and zoning programs in an article that appeared in the July 2002 issue entitled "Keeping 'Em Down on the Farm."
- ▶ New York State's "Smart Growth" website cites the Town of Warwick Zoning Law as an example of a smart growth success story.
- ▶ Warwick's planning strategy was awarded the Upstate Chapter of the American Planning Association's Outstanding Planning Project Honorable Mention in 2002.
- ▶ The Hudson River Valley Greenway's "Tech Assist Toolbox" cites Warwick's planning and zoning documents as models. These include the Zoning Law and its provisions for Ridgeline and Viewshed Protection, Incentive Zoning, Design Guidelines and Design Standards.
- ▶ The Warwick Planning Board and GREENPLAN were commended for "Their outstanding achievement and innovative accomplishments toward better planning ideals for the community" by the Orange County Municipal Planning Federation.
- ▶ The New York Planning Federation and New York State Department of Environmental Conservation uses GREENPLAN's Habitat Assessment tool as a Model.
- ▶ The Pace University Land Use Law Center uses land use controls, developed by GREENPLAN, as models.
- ▶ Scenic Hudson uses GREENPLAN'S Telecommunications Tower law as a model.
- ▶ The Red Hook Intermunicipal Task Force, for which GREENPLAN provides on-going planning assistance, was awarded Pace University Land Use Law Center's "Groundbreakers Award" in 2009.
- ▶ The Red Hook Town Board, for which GREENPLAN provides on-going planning assistance, was awarded the New York Planning Federation's "Pomeroy Award for Zoning Achievement" for the Zoning Amendments it enacted in 2011, which were prepared by GREENPLAN. The Northern Dutchess Alliance awarded Red Hook their "Charting Our Course" Award in 2012 for the Town's planning and zoning initiatives.
- ▶ Advisory Member, Board of Directors of the Winnakee Land Trust, a not-for-profit organization dedicated to land conservation in Dutchess and Columbia counties, NY.
- ▶ Participant on the New York State Department of Environmental Conservation's Ad-Hoc Committee to Re-draft the State Environmental Quality Review Act (SEQR) Regulations.
- ▶ Presented with an American Planning Association, Eastern Pennsylvania Chapter Merit Award for "Outstanding Contributions to the Quality of Planning Within the Chapter Area."
- ▶ Listed, Who's Who in the World (22nd Edition).
- ▶ Traveled to 43 countries on six continents to better understand cultural diversity and how world cultures plan and manage their settlements and green spaces. As Mark Twain wrote in Innocents Abroad, travel is: "fatal to prejudice, bigotry, and narrow-mindedness."
- ▶ Professional Photographer. Photography services for private clients, realtors, and architects. Photographs published by PBS, Island Press, Environmental Defense Fund, Moms Clean Air Force, Huffington Post, Inland Architect, TLC (Discovery Inc. channel), KTVZ TV, Care2.com, The Urban Ecology Newsletter, 350.org, Econesting.com, and Terrain.

PLANS, PUBLICATIONS, LAWS, EXPERT WITNESS AFFIDAVITS AND MORE

1. *Town/Village of New Paltz Community Preservation Plan*. For the Town of New Paltz Community Preservation Task Force and Town Board of the Town of New Paltz, assisted in the preparation of a Community Preservation Plan for the Town and Village of New Paltz under a Hudson River Valley Greenway grant. The Community Preservation Plan provides the basis for creation of a Community Preservation Fund, which was approved by voters in November 2020. The Plan allows the Town to purchase, from willing landowners, land and interests in land (i.e. development rights) to preserve the character of the community. March through July 2020.
2. *Expert Witness on Application of New York Transco LLC for a Certificate of Environmental Compatibility and Public Need Pursuant to Article VII of the New York Public Service Law to Construct, Operate, and Maintain a New 345 Kilovolt Electric Transmission Line and Related Facilities in the towns of Schodack, Stuyvesant, Stockport, Ghent, Claverack, Livingston, Gallatin, Clermont, Milan, Clinton, and Pleasant Valley in Eastern New York State*. Assisting towns and affected parties (Intervenors) along the transmission line right-of-way contribute to the development of a complete record leading to an informed decision in the case, and to foster broad public participation. October 2020.
3. *Affidavit of Expert Witness, J. Theodore Fink, AICP in Lerner-Pavlick Realty Company, Residents Protecting Montgomery v. Town of Montgomery, the Town of Montgomery Planning Board, and Bluewater Partners, LLC*. For the Supreme Court of the State of New York, Orange County, an Article 78 proceeding challenging the decision of the Town Board and Town Planning Board approval of a ±1,000,000 square foot Amazon warehouse on the applications for Zoning Amendment, Site Plan and Special Use Permit approvals. January 2020.
4. *Affidavit of Expert Witness, J. Theodore Fink, AICP in O'Malley, Peloso, McCracken, Leghorn, Arendes, Eichs, and Eaton v. Town of New Windsor Planning Board, Toleman Road Associates, Ltd. and Rock Tavern Village LP*. For the Supreme Court of the State of New York, Orange County, an Article 78 proceeding challenging the decision of the Town Planning Board approval of a ±500,000 square foot warehouse on the application for Stewart Hill Industrial Park, alleging the use is prohibited by the Town of New Windsor Zoning Law. November 2019.
5. *Affidavit of Expert Witness, J. Theodore Fink, AICP in Adler, Bohan, Torrone, Willow, Guenther, Rindlaub, , Adorney, Bozsik, Young, Hazlett, Lozier, Smith, and Navy v. Town of Gardiner Planning Board and Shinrin Yoku LLC*. For the Supreme Court of the State of New York, Ulster County, an Article 78 proceeding challenging the decision of the Town Planning Board approval of an 80 building lodging, dining and event facility known as Heartwood, alleging the approval was inconsistent with the the Town of Gardiner Zoning Law and failed to take a “hard look” at the environmental impacts of the facility in a quiet, rural and ecologically sensitive location. February 2019.
6. *Town of Red Hook Local Waterfront Revitalization Program (LWRP) Update*. Assisting a LWRP Working Group and the Town Board with development of an Update to the Town’s 1995 LWRP document. The Update is focused on development of new policies to mitigate future climate risks from sea level rise, increased frequency and intensity of storms and

- the resultant flooding from these weather related changes. The LWRP update will articulate a vision for the Town's waterfront, will reflect the strategic plans developed by the Mid-Hudson Regional Council to advance economic priorities and provide approaches to build greater community resilience, and will identify opportunities for expansion of public access while protecting sensitive coastal resources, protection of scenic vistas, protection of agricultural resources and open space. Since June 2018.
7. *Town of Fallsburg Draft Zoning: Neversink River Overlay District*. Assisted Catskill Mountainkeeper, a not-for-profit organization, with development of draft Zoning Amendments for the Town of Fallsburg, designed to establish new Zoning rules that would apply to a proposed Neversink River Overlay Zoning District. The Neversink River is significant for its water quality, its association with important public water supply aquifers in the Town, and for its Internationally recognized importance as one of the "Charmed Circle" of legendary Trout streams where fly fishing was refined in America. The recommendations included new Zoning provisions applying to aquifers, agriculture (to encourage and support farming as a viable open space use), hamlet redevelopment for compact growth supported by Town services, protection of biodiversity, establishment of a conservation design process for new development, and policy changes in an Updated Comprehensive Plan that favor agriculture, protection of rural character, and encouraging hamlet development rather than suburban development throughout the Town. April 2018.
 8. *Affidavit of Expert Witness, J. Theodore Fink, AICP in Concerned Citizens For The Hudson Valley v. Town of Goshen, Town of Goshen Planning Board, and Merlin Entertainment Groups, US Holdings*. For the Supreme Court of the State of New York, Orange County, an Article 78 proceeding challenging the decisions of the Town to revise its Comprehensive Plan and Zoning Law to accommodate a previously "Prohibited Use" that had the potential to change Goshen from the largest rural and agricultural town in Orange County to "something else." The changes were alleged, among a number of other points, to: 1) represent "irrational ad hocery" and "spot zoning"; 2) be contrary with the New York Department of State Office of General Counsel's Legal Memorandums; 3) contrary with sound community planning; and 4) procedurally flawed and inconsistent with New York State's Planning and Zoning enabling laws as well as SEQR. January 2018.
 9. *SEQR Analysis and Report: Legoland New York Commercial Recreation Facility Final EIS*. As an Expert Witness for Concerned Citizens For The Hudson Valley, prepared a Report that examined the Final Environmental Impact Statement for the Legoland Commercial Recreation Facility in the Town of Goshen, New York. The Report analyzed the action's compliance with New York State Town Law, the New York State Environmental Quality Review Act and related New York State planning and zoning enabling acts. The Report provided expansive details on the numerous errors and omissions identified in the Lead Agency's SEQR review process as well as the Comprehensive Plan and Zoning Law amendment processes. August 2017.
 10. *Town of Red Hook Complete Streets Program*. Preparing Amendments to the Town of Red Hook Highway Specifications to incorporate "Complete Streets" principles that recognize pedestrians and bicyclists as equally important as motorists in the planning and design of

all new road construction, reconstruction, rehabilitation, and maintenance undertaken by the Town. Working with the Town Board, Highway Superintendent, and an Advisory Committee to develop such Amendments. May 2017 to present.

11. *Town of Warwick 2016 Comprehensive Plan Update*. Prepared an update to the Town of Warwick Comprehensive Plan that includes as official Town policy a number of key sustainability best practices including strengthening its centers supported by transit (i.e. its three villages), creating a complete community, reducing transportation fossil fuel consumption, improving regional infrastructure, reducing energy dependency and strengthening the local economy, expanding renewable energy generation, improving resilience of the energy delivery system, reducing the volume of solid waste, increasing farming and forestry activities and viability, advancing farming and forestry training, increasing residents' access to local food, reducing water consumption, and protecting habitats and water quality. Adopted June 2016.
12. *Red Hook Community Preservation Plan Update*. Assisted the Town Board of the Town of Red Hook and the Red Hook Community Preservation Advisory Fund Board with an update to their adopted 2011 Community Preservation Plan. The Plan is based upon a special New York State Statute (§ 64-h of NY State Town Law), enacted so that a "Community Preservation Fund," supported by revenues from a two (2) percent real estate transfer tax, could be used to protect the Town's farmland and open space, all vital to its future social, economic and environmental health. May 2011 (original Plan) and June 2016 (updated Plan).
13. *Affidavit of Expert Witness, J. Theodore Fink, AICP in RB Jai Alai, LLC v. Florida DOT et al.* For the United States District Court, Middle District of Florida, developed and outlined specific mitigation strategies funded by an "Impact Mitigation Fund" for a highway "Flyover" in the greater Orlando, FL region, based upon a finding by the Court that the DOT, Federal Highway Administration and others had engaged in an arbitrary and capricious action related to a defective environmental review under the National Environmental Policy Act (NEPA). The Court held the Florida DOT and the Federal Highway Administration liable for damages as a result of their defective review processes. October 2015.
14. *Affidavit of Expert Witness, J. Theodore Fink, AICP in Washington Development Associates v. City of Binghamton Planning Commission*. Proffered and elucidated numerous environmental issues that had been ignored during the review of a new college dormitory, proposed in a sensitive location. September 2015.
15. *Village of Cold Spring Zoning Update*. Assisting the Village Board of Trustees and a Code Update Committee with an innovative new zoning law and numerous other Code Amendments, funded through the New York State Energy Research and Development Authority's (NYSERDA) Cleaner, Greener Communities program and the Hudson River Valley Greenway. NYSERDA's program is designed to create local sustainable growth strategies in such areas as emissions control, energy efficiency, renewable energy, low-carbon transportation, and other carbon reductions through collaborative efforts to improve the quality of life, make communities more prosperous while making New York State more economically vibrant. Since July 2015.

16. *Creating a Natural Resources Inventory: A Guide for Communities in the Hudson River Estuary Watershed*. Cornell University Department of Natural Resources, in partnership with the New York State Department of Environmental Conservation's Hudson River Estuary Program. Reviewer of the *Guide*; edited all chapters and appendices for content and accuracy. Prepared a Model Local Law (template) in an Appendix to the *Guide*, designed to be used by local municipalities for adopting a Natural Resource Inventory, addressing the need for periodic updating, and to incorporate consideration of the Natural Resource Inventory in the community's land use controls. Winter 2015.
17. *Planning for Resilient, Connected Natural Areas and Habitats: A Conservation Framework*. Town of Red Hook, NY with financial support from Cornell University and the New York State Hudson River Estuary Program. With Michele Greig, AICP of GREENPLAN, Graham Trelstad, AICP and Peter Feroe, AICP of AKRF, Inc. developed a pilot project for enhancing wetland, stream, and forest resilience; local connectivity of wildlife habitats; connections to the Hudson River estuary; and adaptations of these ecosystems to climate change by preserving connectivity of intact connected natural areas. The planning document was developed through a collaborative stakeholder engagement process, identified conservation opportunities, and short and long-term actions based upon a Geographic Information System (GIS) model developed by Cornell. Fall 2014.
18. *Balancing of Public Interests: Town of Warwick and Pine Island Fire District*. Town Board of the Town of Warwick, Warwick, NY. The preparer of a "balancing of public interests" analysis to determine whether a proposed telecommunications tower, co-sponsored by the Pine Island Fire District, must comply with the Town Code of the Town of Warwick. The analysis is based upon a legal approach, established by the New York State Court of Appeals, to determine if local government agencies will be afforded "limited immunity" from zoning regulations. Draft, October 2014. In a related matter, prepared all SEQR "Lead Agency Dispute Resolution" documents for the Warwick Planning Board v. Pine Island Fire District. The State Commissioner of Environmental Conservation, on March 6, 2015, designated the Warwick Planning Board as the appropriate Lead Agency, based upon the arguments posited in the dispute documents.
19. *Walkway-Gateway Zoning*. City of Poughkeepsie Common Council, Town of Lloyd Town Board, Scenic Hudson, Inc., Walkway Over the Hudson, Inc., and Dutchess Regional Chamber of Commerce, Poughkeepsie, NY. Developed a structure and approach, including preparation of zoning amendments, for the City of Poughkeepsie and Town of Lloyd to implement form-based zoning regulations to achieve smart growth and sustainability objectives in the neighborhoods surrounding largely industrial zoning districts near the Walkway Over the Hudson State Historic Park, Hudson Valley Rail-Trail and Dutchess Rail-Trail. The project created a place-based development strategy to guide physical development and redevelopment that emphasizes physical form rather than separation of uses as a basic organizing principle. The Walkway has drawn up to three-quarters of a million visitors a year but the immediate neighborhoods near its entrances developed in the 19th Century around a freight railroad line. The Walkway-Gateway District concept is to redevelop the neighborhoods surrounding the Walkway area into vibrant walkable mixed-use areas. Elements include standards for quality placemaking

such as lot and building design standards, building placement, frontage types, pedestrian and vehicle circulation, streetscapes, and streamlined (expedited) review procedures. The standards meet the Hudson River Valley Greenway goals, allow for a range of transportation modes but de-emphasizing cars, and incorporate green infrastructure and green development concepts for stormwater, renewable energy, local food production and other environmental benefits. Lighting, signage, screening and landscaping standards were included. Zoning Amendments adopted by Poughkeepsie Common Council in October 2013. Zoning Amendments adopted by Lloyd Town Board in June 2013.

20. *Affidavit of J. Theodore Fink, AICP in Astor Rhinebeck Associates, LLC, v. Town of Rhinebeck and Town Board of the Town of Rhinebeck*, Supreme Court of the State of New York, Dutchess County. A large landowner (1,250 acres) in the Town of Rhinebeck alleged that adoption of the Town Comprehensive Plan and Zoning Law in 2009 failed to address the need for affordable housing. The *Affidavit* supported the Town's position that Rhinebeck had carefully crafted an inclusionary housing program, including the use of a variety of techniques that had never been implemented before in any other Dutchess County community. The Court decided in Rhinebeck's favor. The decision by Justice James V. Brands (Index 3147-2012) made September 2012.
21. *Town of Warwick Zoning Amendments*. Prepared a comprehensive revision of the Town's Zoning Law, originally adopted in 1927. Town of Warwick Code Revisions Committee and Town Board of the Town of Warwick. Adopted January 24, 2002. Prepared additional Zoning amendments adopted 2003, 2004, 2010, 2011, 2013, 2014, 2015, 2016, and 2018. Warwick's many innovative Zoning regulations have been held as models in New York State by the NY State Association of Towns, NY State's "Smart Growth" website, Pace University Land Use Law Center, American Farmland Trust, Glynwood, Harvard Environmental Law Review, New York Zoning Law and Practice Report, Planning magazine, Hudson River Valley Greenway, the Institute of Local Self-Reliance New Rules Project, and the Smart Growth Network. This includes but is not limited to a Biodiversity Conservation Overlay Zoning District, a Ridgeline Overlay District, an Aquifer Protection Overlay District, an Agricultural Protection Overlay District, and a Land Conservation Zoning District. Other innovations include Solar Energy amendments permitting large-scale facilities on farms while protecting agricultural resources, an Intermunicipal Agreement with the Village of Warwick to establish a Transfer of Development Rights (TDR) program so that important agricultural lands in the Town can be protected, and planning support related to the Town's Purchase of Development Rights (PDR) Programs. The TDR and PDR programs involve conservation easements on farmland through either transfer of development potential to the Village or areas adjoining the Village in the Town (where the new development's density increases proportionately and complies with Form-based Zoning principles for new Traditional Neighborhoods), or respectively through outright purchase of the future development potential on farms. Since 1992.
22. *Town of Bethel Land Use Analysis*. Town Board of the Town of Bethel, Sullivan County, NY. Assisted the Town Board with an analysis of the potential impacts of hydraulic fracturing for natural gas development on land use in the Town. Adopted January 2012 followed by

the adoption of Zoning Amendments to prohibit natural gas extraction and development in February 2012.

23. *Village of Cold Spring Comprehensive Plan, Local Waterfront Revitalization Strategy (LWRS), and Local Waterfront Revitalization Program (LWRP)*. Village of Cold Spring Special Board and Board of Trustees, Putnam County, NY. Assisted a Special Board with the preparation of a Comprehensive Plan and Local Waterfront Revitalization Strategy. The LWRS was approved by New York State in November 2011. The Comprehensive Plan was adopted by the Village Board in January 2012. Since 2014, assisting a Code Update Committee (see above) with a series of Zoning Amendments focused on sustainability and assisting the Village Board with completion of a Local Waterfront Revitalization Program (LWRP) document. Since 2009.
24. *Tompkins County Community Impact Assessment*. Tompkins County Council of Governments, Ithaca, NY. Prepared an assessment of the potential environmental, community, and economic impacts of high volume hydraulic fracturing using horizontal drilling techniques for the natural gas that underlies the Marcellus Shale region, to provide reliable and factual information for 17 municipalities in Tompkins County, including the Town of Dryden, so they would be better prepared if New York State issued permits to the gas industry. Approved by the Council's Gas Drilling Task Force, December 2011. Dryden prohibited natural gas (and oil) exploration and extraction through its Zoning Law. The Zoning Law was then challenged by natural gas interests. Dryden's Zoning Law was upheld through a series of court decisions that reached the New York State Court of Appeals in a precedent setting decision (see Middlefield Land Use Analysis below). The *Community Impact Assessment* was cited in the New York State Court of Appeals documents filed in support of the ban. Adopted December 2011.
25. *Town of Red Hook Comprehensive Plan, Zoning Law and Subdivision Regulations*. Assisted an Intermunicipal Task Force and Town Board with the development of Plan, Zoning and Subdivision modifications. Adopted September 2011.
26. *Town of Taghkanic Zoning Law*. Assisting the Town Board and Zoning Commission prepare a comprehensive rewrite of the Town Zoning Law. The first amendments addressing mining uses were adopted in September 2011 and the remainder of the Zoning amendments are expected to be adopted in 2017.
27. *Town of Middlefield Land Use Analysis*. Town Board of the Town of Middlefield, Otsego County, NY. Assisted the Town Board (in the town surrounding the Village of Cooperstown, NY) with an analysis of the potential impacts of hydraulic fracturing for natural gas development on land use in the Town. The Analysis became the basis for enactment of a prohibition on oil, gas or solution mining and drilling in the Town, through a new Zoning Law. The Zoning was then challenged by natural gas interests but was upheld by the New York State Court of Appeals in a precedent-setting decision. **The Court of Appeals quoted the Middlefield Land Use Analysis in its decision, upholding the Zoning Law prohibition on oil and gas activities, as valid.** (see also Tompkins County Community Impact Assessment above). Adopted May 2011.
28. *Affidavit of J. Theodore Fink, AICP in Creed-Monarch, Inc. d/b/a Creed Ankony Farm, Astor Courts, LLC, Andrew Solomon As Trustee of the Andrew Solomon Trust, Martin Sosnoff, Toni*

- Sosnoff, Allison Hall, and Illiana van Meeteren, v. Town Board of the Town of Rhinebeck and Town of Rhinebeck.* Supreme Court of the State of New York, Dutchess County. A group of large landowners in the Town of Rhinebeck alleged that adoption of the Town Comprehensive Plan and Zoning Law in 2009 lacked any rationale for the creation of a new Historic Preservation 20 Acre (HP-20) Zoning District. The Affidavit supported the Town's position that Rhinebeck had carefully undertaken a planning analysis and justification for the new 20-acre density requirement in a District adjacent to the Hudson River. The District addressed historic landscapes that gave rise to the Hudson River School of Painting. The Plan's Vision is to protect agricultural and other open space uses while curbing rapid population growth in the Town, reinforcing Rhinebeck as a Nationally Significant scenic and historic rural community. The planning technique included the use of a variety of techniques that had never been implemented before in any other New York State community. The Court's decision upheld all aspects of Rhinebeck's Zoning that were challenged. The decision by Justice James V. Brands (Index 3116-2010) made April 2011.
29. *Town of Warwick Design Guidelines and Design Standards.* Use of the Guidelines is encouraged in the Warwick Zoning Law and required for certain nonresidential uses. Use of the Design Standards is required in certain retail zoning districts. Addresses scenic resources including scenic roads as well as rural, nonresidential, and hamlet development. Adopted by the Town Board in 2002 and 2010 respectively.
 30. *Town of Clinton Comprehensive Plan, Open Space Plan and Agricultural and Farmland Protection Plan.* Assisted the Town Board of the Town of Clinton, and special committee's appointed to advise the Town Board, with the preparation of three plans. The Agricultural and Farmland Protection Plan was approved by New York State in 2010. The other plans were adopted by the Town Board in 2012.
 31. *The Rhinebeck Plan.* Prepared a comprehensive plan and implementing Zoning Law, Subdivision Regulations and a Freshwater Wetlands Law for the Town of Rhinebeck, Dutchess County, NY. The Plan focuses on the development of growth centers while protecting the rural character of the remainder of the Town (a "Centers and Greenspaces Plan"). Adopted December 2009. Two legal challenges to the 2009 Zoning Law were decided in the Town's favor by the Dutchess County Supreme Court.
 32. *Village of Warwick Zoning Law.* Village of Warwick Board of Trustees, Orange County, NY. Rewrote the Village's Zoning regulations, including design guidelines, to reflect a newly adopted Comprehensive Plan. Adopted February 2009.
 33. *Town of Fishkill Comprehensive Plan and Zoning Amendments.* Town of Fishkill Comprehensive Plan Review Committee and Town Board of the Town of Fishkill, Dutchess County, NY. The Comprehensive Plan was adopted in February 2009.
 34. *Town of Warwick Comprehensive Plan.* Town of Warwick Comprehensive Plan Board and Town Board of the Town of Warwick. Adopted 1999. Plan Update adopted 2008. Another Plan Update, addressing sustainability policies, was adopted in June 2016 (see above for description).
 35. *Town of Milan Comprehensive Plan.* Town of Milan Comprehensive Plan Review Committee and Town Board of the Town of Milan, January 2000 to 2007. The Plan was challenged in court but was upheld by the New York State Appellate Division, Second Judicial

- Department in a precedent-setting decision. The case was significant because the New York State Attorney General's Office acted as counsel for the Town Board, based upon the indemnification provisions of the Hudson Valley Greenway Compact. April 2010.
36. *Town of Wawayanda Comprehensive Plan*. Town of Wawayanda Comprehensive Plan Review Committee and Town Board of the Town of Wawayanda, Orange County, NY. August 2004 to June 2006.
 37. *Town of Copake Scenic Resource Protection Plan*. Comprehensive Plan Steering Committee and Town Board of the Town of Copake, Columbia County, NY. Adopted August 2005.
 38. *Town of Greenville Comprehensive Plan*. Town of Greenville Comprehensive Plan Board and Town Board of the Town of Greenville. Adopted 2005.
 39. *Kingston Mixed Use Overlay District Comprehensive Plan and Draft/Final Generic Environmental Impact Statements*. A comprehensive plan designed as a GEIS that addresses adaptive reuse of vacant commercial and industrial buildings in two areas of the City, while providing for affordable housing. City of Kingston Common Council. Adopted August 2004.
 40. *Red Hook Land Use, Conservation and Development Working Group Report*. The Report addresses where various types of development should be targeted, where open space should be protected, and how the Town Board can achieve a land use vision for the community. Completed 2004.
 41. *Karma Triyana Dharmachakra (KTD) Replacement Monastery Draft and Final Environmental Impact Statements and Findings Statement*. KTD, 2001 through 2004.
 42. *Town of Lloyd Comprehensive Plan*. Town of Lloyd Planning Board and Town Board of the Town of Lloyd. Adopted 2004.
 43. *Village of Wappingers Falls Sign Guidelines*. Village of Wappingers Falls Planning Board and Board of Trustees. Adopted 2003.
 44. *Town of Lloyd Comprehensive Plan Amendments*. Town Board of the Town of Lloyd and Town of Lloyd Planning Board. Adopted February 2003.
 45. *Village of New Paltz Landscape Guidelines*. Village of New Paltz Planning Board and Board of Trustees. Adopted December 2002.
 46. *Village of New Paltz Lighting Standards*. Village of New Paltz Planning Board and Board of Trustees. Adopted December 2002.
 47. *Kingston O-3 Limited Office Comprehensive Plan and Draft/Final Generic Environmental Impact Statements (GEIS)*. A comprehensive plan designed as a GEIS that addresses homelessness and affordable housing. City of Kingston Common Council. Adopted May, 2001.
 48. *Adult Use Study: Town of Fishkill*. Town Board of the Town of Fishkill. August 2001.
 49. *Dutchess Central Utility Corridor Draft and Final Environmental Impact Statements and Findings Statement*. Dutchess County Water and Wastewater Authority, February, 2001.
 50. *Town of Warwick Open Space Plan*. Town of Warwick Open Space Committee and Town Board of the Town of Warwick, January 2000 through December 2001.
 51. *Village of Wappingers Falls Comprehensive Plan*. Village of Wappingers Falls Board of Trustees and Village of Wappingers Falls Comprehensive Plan Committee. Adopted 2001.

52. *Town of Milan Wireless Communications Facility Local Law*. Town Board of the Town of Milan. Adopted December 2000.
53. *Town of Amenia Subdivision Regulations*. Town Board of the Town of Amenia and Town of Amenia Planning Board. Adopted August 2000.
54. *Town of Amenia Site Plan Regulations*. Town Board of the Town of Amenia and Town of Amenia Planning Board. Adopted August 2000.
55. *Town of Amenia Zoning Amendments*. Town Board of the Town of Amenia and Town of Amenia Planning Board. Adopted June 2000.
56. *Town of Greenville Zoning Amendments*. Town Board of the Town of Greenville, November 1999.
57. *Village of New Paltz Zoning Amendments for Senior Housing*. Village of New Paltz Board of Trustees. Adopted 1999.
58. *Town of Warwick Telecommunications Local Law*. Town of Warwick Planning Board and Town Board of the Town of Warwick. Adopted 1999.
59. *Town of Amenia Ridgeline Protection Overlay Zone*. Town Board of the Town of Amenia and Town of Amenia Planning Board, August 1999.
60. *Town of Shawangunk Zoning Amendments*. Town Board of the Town of Shawangunk. Phase 1 adopted 1997, Phase 2 adopted 1999.
61. *Town of Amenia Comprehensive Plan Amendments*. Town Board of the Town of Amenia and Town of Amenia Planning Board, July 1998.
62. *Town of Lloyd Zoning Amendments*. Town Board of the Town of Lloyd and Town of Lloyd Planning Board, various dates.
63. *Village of New Paltz Zoning Amendments for the B-1 Zone*. Village of New Paltz Board of Trustees. Adopted 1998.
64. *Adult Use Study: Town of Shawangunk*. Town Board of the Town of Shawangunk, January 1998.
65. *Village of New Paltz Interim Development Regulations for the Gateway Zoning District*. Village of New Paltz Board of Trustees. Adopted 1998, co-authored.
66. *Town of Warwick Zoning Amendments for Senior Housing*. Town Board of the Town of Warwick. Adopted 1997.
67. *Dutchess County Water and Wastewater Authority Acquisition of the Water System Assets of the Hyde Park Fire and Water District Draft Generic Environmental Impact Statement*. Dutchess County Water and Wastewater Authority, 1997.
68. *Village of New Paltz Gateway Zoning District Generic Environmental Impact Statement*. Village of New Paltz Board of Trustees. Adopted 1998.
69. *Adult Use Study: Village of Washingtonville*. Village of Washingtonville Board of Trustees, 1997.
70. *Town of Shawangunk Comprehensive Plan Amendments*. Town Board of the Town of Shawangunk. Adopted 1997.
71. *Adult Use Study: Town of Lloyd*. Town Board of the Town of Lloyd, 1996.

72. *Adult Use Study: Town of Hyde Park*. Town Board of the Town of Hyde Park, 1996.
73. *Zoning Law Amendments Governing Adult Uses*. Town Board of the Town of Hyde Park. Adopted 1996.
74. *District Bus Maintenance and Storage Facility Draft Environmental Impact Statement*. Beacon City School District, February 1996.
75. *Adult Use Study: City of Kingston*. City of Kingston Common Council, 1996.
76. *Mining Amendments Local Law*. Town Board of the Town of Wawayanda. Adopted 1995.
77. *Town of Wawayanda Comprehensive Plan Amendments*. Town Board of the Town of Wawayanda. Adopted 1995.
78. *Zoning Amendments Governing Earth Operations Draft and Final Environmental Impact Statements and Findings Statement*. Town Board of the Town of Wawayanda, November 1993 to May 1995.
79. *Village of New Paltz Comprehensive Master Plan*. Village of New Paltz Planning Board. Adopted 1994.
80. *Hickory Ridge Subdivision: Draft and Final Environmental Impact Statements and Findings Statement*. Town of New Paltz Planning Board, 1992 through 1994.
81. *Dutchess Stadium Draft Environmental Impact Statement*. Dutchess County Industrial Development Agency, December 1993.
82. *Milan Zoning Law Draft Environmental Impact Statement*. Town Board of the Town of Milan, October 1992 through January 1993.
83. *Westage at Castle Point Fiscal Impact Analysis*. Town of Fishkill Planning Board, 1993 through 1995.
84. *Breaking New Ground: Designing a Hyde Park Hamlet*. Winnakee Land Trust Newsletter, No. 5, Summer 1992.
85. *Senior Housing Floating Zone Local Law*. Town Board of the Town of Warwick, 1992.
86. *Town of Clinton Zoning Law Draft and Final Environmental Impact Statements and Findings Statement*. Town Board of the Town of Clinton, 1990 through 1992, Editor.
87. *Town of Dover Master Plan Adoption Environmental Assessment Form*. Town of Dover Planning Board, 1992.
88. *Town of Dover Mined Land Reclamation Local Law*. Town Board of the Town of Dover, June 1991.
89. *City-Town Water Agreement: Draft and Final Environmental Impact Statements and Findings Statement*. City and Town of Poughkeepsie, 1990 through 1991, Editor.
90. *Cedar Knolls Subdivision: Draft and Final Environmental Impact Statements*. Town of Fishkill Planning Board, 1989 through 1990, Editor.
91. *St. Simeon Senior Housing Draft Environmental Impact Statement*. Town Board of the Town of Poughkeepsie, 1989 through 1990, Editor.
92. *Town of Washington Master Plan, Zoning Law and Subdivision Regulations Draft and Final Environmental Impact Statements and Findings Statement*. Town Board of the Town of Washington, 1989, Editor.

93. *Red Oak Commons Planned Unit Development Draft and Final Environmental Impact Statements*. Town of Poughkeepsie Planning and Town Boards, 1988 through 1989, Editor.
94. *Pond Hills Planned Unit Development Draft and Final Environmental Impact Statements*. Town of LaGrange Planning Board, 1988 through 1990, Editor.
95. *Birch Hill Manor Draft and Final Environmental Impact Statements*. Town of Beekman Planning Board, 1986 through 1988, co-authored.
96. *Town of Poughkeepsie Local Waterfront Revitalization Program*. Town Board of the Town of Poughkeepsie, 1987, authored sections of the Program document.
97. *Silver Lake Development Draft and Final Environmental Impact Statements*. City of White Plains Common Council, 1985.
98. *Nissequogue River State Scenic and Recreational River Boundary Establishment: Draft Environmental Impact Statement and Boundary Justification Report*. Town of Smithtown Planning Department, 1985.
99. *Villa Loretto Adaptive Reuse Draft and Final Environmental Impact Statements*. City of Peekskill Planning Board, 1985.
100. *Maple Brook Townhouses Draft and Final Environmental Impact Statements*. Town of Yorktown Planning Board, 1985.
101. *Recommendations for Improving Public Recreational Access to the Hudson River*. New York State Department of Environmental Conservation, Division of Fish and Wildlife, December 1984.
102. *Upper Delaware National Scenic and Recreational River Draft Environmental Impact Statement and River Management Plan*. National Park Service, October 1982, co-author of portions of the Plan and EIS as a member of an Intergovernmental Planning Team.
103. *Legal Authorities and Programs for Resource Management and Land Use Control in New York State*. NYS-DEC, Division of Lands and Forests, September 1982.
104. *Evaluation of Local Authority and Plans for the Upper Delaware National Scenic and Recreational River*. NYS-DEC, Division of Lands and Forests, May 1982.
105. *Nissequogue River Summary Study Report*. NYS-DEC, Division of Lands and Forests, March 1982.
106. *Ramapo River Summary Study Report*. NYS-DEC, Division of Lands and Forests, March 1982.
107. *Shawangunk Kill Summary Study Report*. NYS-DEC, Division of Lands and Forests, November 1981.
108. *Land and Water Use Controls in the United States*. NYS-DEC, Division of Lands and Forests, October 1981.
109. *Grant Park's 150 Years*. Inland Architect, Volume 24, Number 2, March 1980.
110. *Preserving and Recreating The Urban Forest*. The Neighborhood Works, Volume 3, Number 1, January 11, 1980.
111. *Is Area's Open Space Threatened?* Illinois Parks and Recreation, Volume 10, Number 5, September/October 1979, co-authored.

112. *Grant Park Tomorrow*. Open Lands Project, National Endowment for the Arts and Illinois Humanities Council, June 1979. Cited in [Grant Park: The Evolution of Chicago's Front Yard](#), by Dennis H. Cremin; Northwestern University School of Law, Northwestern University Law Review Vol. 105, No.4; [Private Rights in Public Lands: The Chicago Lakefront, Montgomery Ward, and The Public Dedication Doctrine](#), by Joseph D. Kearney and Thomas W. Merrill; City of Chicago's [City Space Implementation](#) publication; The Art Institute of Chicago, [The Plan of Chicago: 1909-1979](#), An Exhibition of the Burnham Library of Architecture; [Retículos I Diagonals: El Pla Jaussely de Barcelona de 1907 I el Pla Burnham de Chicago de 1909](#) [Doctoral Thesis](#) of Carme Fiol Costa; and [Wikiwand](#), [Triposo](#), [Wikipedia](#), and [Chicago Park District](#) Websites.
113. *Urban flight taking jobs from Chicago poor*. [Chicago Sun-Times](#), May 27, 1979, co-authored.
114. *Is Area's Open Space Threatened?* [Chicago Tribune](#), January 4, 1979, co-authored.
115. *Grant Park Has Cornerstone of Luck and Determination*. [Chicago Tribune](#), July 20, 1978, co-authored.