

## MEMORANDUM

To: Steven Reichert, Fuss & O'Neill, Inc.  
From: Camoin Associates  
Date: 3/7/2022  
Re: **Peer Review of Friar's Drive Property Value Impact Analyses**

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Fuss & O'Neill requested Camoin Associates to conduct a peer review of J. Chet Rogers' and CBRE's analyses of the impact of a proposed industrial warehouse on surrounding residential property values in the Town of Hudson, NH.

### Key Findings

Camoin Associates reviewed the analyses conducted by J. Chet Rogers and CBRE regarding the proposed distribution facility at 161 Lowell Road, Hudson, NH and its potential impacts on neighboring residential property values. Based on our review of these documents, we believe that there is compelling evidence that the proposed facility is unlikely to generate a negative impact on the value of neighboring residential properties.

However, property value impacts by their nature are very site-specific and highly dependent upon site characteristics and mitigation measures. Both reports include only brief discussions of potential adverse impacts (noise, light, air pollution, visual, traffic, etc.) and therefore we cannot with high confidence confirm the conclusions of both studies that there will be no adverse impact to neighboring residential property values without further evaluation and discussion of these potential disamenities.

Key findings from Camoin Associates' peer review are provided below with a more detailed review of each provided on the following pages:

#### J. Chet Rogers: Friars Drive, Proposed Industrial Warehouse Building, Hudson

- The analysis conducted by Mr. Rogers of sale prices before and after announcement of the proposal is a reasonable and standard methodology and we agree with Mr. Rogers' conclusion that there was no diminution in neighboring home prices following the announcement, which is readily apparent in the home sales data presented in the analysis.
- However, there are key limitations of the analysis that should be noted, including:
  - Caution should be made in inferring that the lack of a negative impact post-*announcement* means that there will not be a negative impact post-*construction*, when any impacts are more acutely observable and experienced by property owners and prospective purchasers.
  - The analysis demonstrates only a *net* positive impact, and an adverse impact may have in fact existed but was simply "outweighed" by other factors such as overall market improvement.



- A comparison of the sales of homes in the neighborhood to the sale price of similar properties elsewhere in the local market area (e.g., paired sales analysis) or to overall local market trends would be necessary to conclude that no adverse impact on property values was created by the announcement.
- Published literature generally indicates that site-specific mitigation measures affect whether industrial facilities have adverse impacts on neighboring property values. We have not independently assessed the proposed mitigation measures and the sound and light impact studies and any other studies regarding potential adverse impacts of the development. Mr. Rogers briefly discusses site characteristics and cites completed impact studies and concludes that no adverse impacts will be experienced by neighboring residential properties, but we are unable to corroborate or rebut the conclusions drawn from these studies by Mr. Rogers and whether the full range of potential adverse impacts have been adequately considered (e.g., traffic).
- Mr. Rogers also reviewed 2020 analyses by Wesley Reeks and Trimont Real Estate Advisors for the proposed Hudson Logistics Center, as well as peer reviews of both analyses conducted by Russ Thibeault of Applied Economic Research. The Trimont analysis also summarized a 2015 study by Jonathan Wiley. While the Reeks and Trimont analyses were for a potential, *announced* development, they examined residential prices before and after *construction* of distribution centers at comparable sites. Reeks, Trimont, and Wiley all make defensible conclusions that new warehouse/distribution development does not adversely affect neighboring residential property values, and the Reeks and Trimont analyses may be at least as, or more relevant, to the Friars Drive proposal than to the Hudson Logistics Center.
- Overall, Mr. Rogers presents a compelling argument for his conclusion that “the new industrial building will have no measurable effect on the value of residential properties nearby,” however, there is insufficient discussion of the potential adverse impacts post-construction (light, noise, air pollution, traffic, etc.) for us to confirm that conclusion.

#### CBRE: Warehouse Impact on Nearby Residences

- The CBRE report examines, and in some cases expands on, research previously conducted, including analysis of similar projects in Hudson and elsewhere. While this is a standard approach, it should be noted that CBRE does not provide an analysis of property value impacts to residential properties neighboring the proposed distribution facility at 161 Lowell Road and therefore the conclusions are drawn from studies of other facilities.
- CBRE’s summary of the Trimont analysis does not make it clear that the analysis is not of the Friars Drive site, referring only to Trimont’s “study of residential home prices in the area surrounding the new development in Hudson.” In addition, the summary repeats only Trimont’s findings of its review and replication of Wiley’s 2015 research. CBRE does not address Trimont’s analysis of comparable logistics sites for the Hudson Logistics Center.
- The CBRE report further addresses studies for the Hudson Logistics Center, which updates analysis undertaken by Mr. Reeks and provides strong evidence that the public *announcement* of that project did not have a negative impact on neighboring residential home prices. The analysis also offers comparison benchmarks to the town of Hudson, suggesting that home prices increased



*greater* in the neighborhood adjacent to the proposed logistics facility than in the town as a whole.

- CBRE's summary of Applied Economic Research's peer reviews of the Trimont and Reeks studies is unclear and somewhat misleading. AER's views and findings are greatly simplified and presented in a manner that inaccurately conflates them with CBRE's own conclusions.
- CBRE provides brief excerpts from three white papers dated from 1958 to 1970. The excerpts address the general impacts of industrial parks on local communities and do not examine their effects on neighboring property values. The most specific benefits cited are an increase and stabilization of property taxes, with minimal consumption of public services, and "the stimulating effect they have on the local economy," such as through added jobs and wages.
- The report documents improvements to the Lowell Road/Friars Drive site created by GFI Partners from community feedback. While the types of measures discussed would reasonably be expected to mitigate adverse impacts to neighboring properties, we have not independently assessed these improvements and therefore cannot conclude whether they are sufficient.

#### Literature Review

- While a review of the literature finds that, in general, proximity to industrial sites tends to reduce residential property values, very few studies analyze the effects of the development of a new industrial site on neighboring home values. Studies of commercial and industrial development next to residential areas yield more nuanced results due to "the extremely localized character of the impact." For example, increased traffic from commercial development decreases home values only for those homes located on the streets with increased traffic intensity, and commercial development appears to have no effect on property values as long as it is not visible from residential properties. Our literature review therefore confirms the need for greater site-specific analysis and discussion of potential adverse impacts (noise, light, traffic, etc.).



## J. Chet Rogers Letter (February 21, 2022)

The analysis conducted by Mr. Rogers of sale prices before and after announcement of the proposal is a reasonable and standard methodology. However, there are key limitations of the analysis that should be noted. Comparing the price trend of properties next to the proposed warehouse with the trend for similar properties elsewhere in the local market area (paired sales analysis) or to overall local market trends would clarify the effects of the proposed warehouse announcement on adjacent property values. For example, the analysis demonstrates only a *net* positive impact, and an adverse impact may have in fact existed but was simply "outweighed" by other factors such as overall market improvement. Also, caution should be made in inferring that the lack of a negative impact post-*announcement* means that there will not be a negative impact post-*construction*, when any impacts are more acutely observable and experienced by property owners and prospective purchasers.

*We compared selling prices after July 2021 and selling prices before July 2021. We found that prices, for the most part, went up despite the potential industrial building.*

By its nature this analysis is forward-looking, and using the knowledge of the proposed project as a proxy for the actual building is perhaps the best that can be done. However, the actual existence of such a building, with the attendant truck traffic, noise, etc. may have different effects than simply the knowledge that such a building may be constructed. And the fact that the warehouse proposal has been publicly announced does not mean that all residential real estate buyers have knowledge of it. Mr. Rogers does reference "sound and light studies presented by the applicant and peer reviewed by the Town's consultants" that indicate that "there will be no adverse effect" on existing homes on Hickory Street.

Comparing price changes over the same period for comparable properties in Hudson that are *not* adjacent to a proposed industrial site, or even examining overall residential price trends over the period, might be a more appropriate approach. While positive, the price growth at Fox Hollow Condominiums may have been slower than similar properties elsewhere or than the broader market.

Friars Drive is already home to several large industrial and commercial properties, including Integra Biosciences, FWM Docks & EZ Dock Northeast, Rugged Aluminum Trailers, Granite State Plastics, and an RJ Shinner-Hudson warehouse. There is a new apartment complex under construction at the intersection of Friars Drive and Lowell Road (Friars Court) which will be directly affected by increased truck traffic at the proposed warehouse. Rental rates for these apartments may already account for the effects of the proposed new warehouse.





### Proposed Friars Drive Distribution Center Site



Source: Camoin Associates, Esri

### Architect's Rendering of Proposed Warehouse



Source: applied Form + Space



*Fox Hollow Condominiums consists of 30 buildings and 240 units on 35 acres of land. Of the 30 buildings, eight abut the Subject property and have a berm on their own property and thick woods on the Subject parcel, separating these condominiums from any potential view, or other impact, of the new industrial building.*

*The condominiums are all townhouse style units with eight to a building and have only four different models, ranging from 994 square feet, 1,036 square feet, 1,138 square feet and 1,184 square feet. We found twenty-eight sales between January 2019 and June 2021, and eight sales from July 2021 to February 2022.*

While it is appropriate to segment the analysis by size of residential unit, it is not clear if the units sold were in buildings abutting the Subject property. However, there may not be sufficient data to segment the analysis by adjacent and nonadjacent buildings. And again, a comparison to sales of similar units not adjacent to a warehouse would provide context.

*I read earlier studies by Wesley Reeks, MAI and Trimont Real Estate Advisors and peer reviews by Russ Thibeault, NHCG-4, President of Applied Economic Research for a similar, but significantly larger, project at the Green Meadows Golf Course also in Hudson. Trimont reviewed a study by Jonathan A. Wiley, Ph.D, entitled The Impact of Commercial Development on Surrounding Residential Property Values, April 2015. All of these studies and peer reviews concluded that there was no evidence of diminution of value on residential properties nearby.*

Reeks and Trimont analyze a total of six comparable sites in New Hampshire, Massachusetts, and Connecticut. Both studies assess the change in property values before and after the construction of distribution centers, rather than simply the announcement of such a facility. Both Reeks and Trimont conclude that the proposed Hudson Logistics Center would not adversely affect neighboring property values.

However, Thibeault's peer reviews find problems with both analyses. Thibeault criticizes Reeks' analysis because "the case studies in this analysis are not sufficiently comparable to the Logistics Hudson proposal and its relationship to abutting residential units. Factors such as prior use, proximity, market orientation, other environmental issues, line of sight, pre-existing screening, noise, traffic, general land use compatibility, the extent of change in land use, air quality, neighborhood light pollution, etc. are site-specific factors that can alter the market appeal of residential units abutting proposed non-residential development." Thibeault does not provide an opinion of the impact of the logistics center and concludes that "it is difficult to substantiate a definitive, certain conclusion."

We think Thibeault is correct to question not only the "internal" comparability of the residential units in the Walmart Raymond analysis by Reeks (his comparison home sales were of in-fill houses in mobile home/manufactured home neighborhoods), but also the comparability of the Walmart



facility to the proposed Hudson Logistics Center. And while Thibeault criticizes Reeks' comparison of the Londonderry FW Webb distribution center to the Hudson Logistics Center, it may be more comparable to the proposed Lowell Road/Friars Drive warehouse. Reeks did not find evidence of a diminution of adjacent residential property values from the construction of the Webb facility.

He has a similar critique of the Trimont analysis, finding it to be "overly generic" and insufficiently thorough with respect to site-specific factors. Thibeault also criticizes the use of "overly broad geography in addressing one of the key Hudson issues—the impact on abutting properties," and finds the use of Zillow for the analysis of neighboring properties to be a "less than reliable data source." Again, Thibeault does not comment on the expected impacts of the proposed Hudson Logistics Center.

While Thibeault does raise valid methodological points, the Reeks and Trimont analyses may be "good enough" in the face of an unobtainable perfection and finite budgets. In many respects, such as topography and ground cover, the Reeks and Trimont analyses may in fact be more comparable to the Friars Drive site, and thus their conclusions more relevant to the current project.

The 2015 Wiley study of the Atlanta metropolitan area finds "Sites targeted for new industrial development exist in neighborhoods where values are relatively lower and already experiencing a downward trend in advance of the project completion. While price compression continues in the post-completion period, the trajectory is not significantly different than the counterfactual projection (supposing no industrial development had occurred).... The sample of industrial developments includes a disproportionate count of large-scale projects (e.g., those delivering more than 150,000 square feet of gross leasable area), yet the existing trend is largely unaffected in the period that follows an industrial development completion." That is, while property values are found to have declined following a new industrial completion (the period of analysis was 2006 to 2014, just prior to and during the Great Recession), the direction and magnitude of the decline are consistent with what would have been expected for the area had no development activity occurred.

*The Subject in this area is also heavily wooded and has upward sloping land with a proposed development plan to preserve the slope and enhance it with a berm on the top and a solid fence on top of the berm. Line of sight models presented by the applicant reflect little, if any, visibility of the proposed facility. Additionally, sound and light impact studies presented by the applicant and peer reviewed by the Town's consultants reflect that there will be no adverse effect on these homes from the new industrial building and its proposed use.*

We have not independently reviewed the referenced sound and light impact studies. It is unclear from Mr. Rogers' letter if the reviewed studies adequately addressed the full range of potential adverse impacts to neighboring properties.



Specifically, while sound, light, and visual impacts are presumably adequately addressed by those studies as stated, there is insufficient discussion of new traffic generation to understand whether adverse property value impacts might be generated from new truck traffic on Lowell Road. While we might reasonably expect this new traffic to be incremental rather than transformative given the presence of existing industrial facilities on Friar's Drive, Mr. Rogers does not directly address future traffic impacts or whether these impacts were considered in the town's sound and light impact studies that are referenced.

### **CBRE Analysis: Warehouse Impact on Nearby Residences (March 1, 2022)**

The CBRE report examines, and in some cases expands on, research previously conducted, including analysis of similar projects in Hudson and elsewhere. While this is a standard approach, it should be noted that CBRE does not provide an analysis of property value impacts to residential properties neighboring the proposed distribution facility at 161 Lowell Road and therefore the conclusions are drawn from studies of other facilities.

#### **Trimont Study (Reviewed by Applied Economic Research and CBRE)**

Trimont Real Estate Advisors was engaged by Hillwood Enterprises to determine if the development of the proposed Hudson Logistics Center would impact neighboring residential property values. Analyzing four comparable logistics sites in New Hampshire, Massachusetts, and Connecticut, Trimont concludes that "there will be no diminishment of value to the residential properties surrounding the Hudson Logistics Center Property."

Trimont also reviewed and replicated Wiley's 2015 study, "The Impact of Commercial Development on Surrounding Residential Property Values." Based on Wiley, Trimont notes that industrial buildings have the lowest number of employees per square foot compared with office and retail, minimizing their effects on traffic and density. They also conclude that "a distribution facility is less utility intensive, typically employs less (which limits traffic and congestion), and generally has less of an environmental impact" than traditional industrial manufacturing facilities. However, the fact that both the Hudson Logistics Center and the Lowell Road/Friars Drive warehouse are distribution centers implies that they will likely generate a significant amount of truck traffic for loading and unloading, despite having fewer employees than other industrial facilities.

CBRE's summary of the Trimont analysis does not make it clear that the analysis is not of the Lowell Road/Friars Drive site, referring only to Trimont's "study of residential home prices in the area surrounding the new development in Hudson." (In fact, the Hudson Logistics Center does not appear to have been constructed yet.) In addition, the summary repeats only Trimont's findings of its review and replication of Wiley's 2015 research. It does not address Trimont's analysis of comparable logistics sites for the Hudson Logistics Center.





### Wesley Reeks, MAI & Expanded and Updated Sale Research

The CBRE report expanded on the property sales research conducted by Mr. Reeks of two distribution/logistics centers in southern New Hampshire. Again, referring to "the proposed development in Hudson," CBRE does not clarify that Reeks' analysis was for the Hudson Logistics Center, not the Lowell Road/Friars Drive distribution center.

Sales at the Green Meadow Subdivision in the neighborhood that abuts the golf course were examined pre- and post-announcement of the application submitted to the Planning Board for the Hudson Logistics Center.

Six (6) sales were identified that occurred after the announcement of the application submission. The sales data supports the conclusion that the announcement of the logistics center did not have a net negative impact on sale prices. The average price per square foot of the six sales was approximately \$228. By comparison, the average price per square foot of the six previous sales was approximately \$190 (June 2017–October 2019).

CBRE's report also examined 92 home sales within the full neighborhood using data from the Town of Hudson Assessor's office. The analysis showed a pre-announcement average sales price of \$199 per square foot compared with \$238 post-announcement. The average sales price pre-announcement was \$450,989 compared with \$510,620 post-announcement. The analysis appropriately breaks down the sales comparison by number of bedrooms to show that the increase in values was demonstrated among homes of the same size.

We agree with the conclusion of the analysis that the proposal did not have a negative impact on the home price trend in the neighborhood. However, it does not necessarily indicate that the proposal did not have an adverse impact on property values, as overall market improvement may have simply outweighed any negative impact, resulting in a net positive increase in values.

The overall Town of Hudson home sales data provides information to better understand whether home values in the neighborhood may have increased by a greater margin without the announcement of the proposal. From 2018 through 2021, the average sales price in the town increased 8.2% (6.3% on a per-square-foot basis). By comparison, the average sales price of homes in the study neighborhood increased 13.2% (approximately 19.6% on a per-square-foot basis) from March 2018 through July 2021.

This result indicates that sale prices of properties in the neighborhood increased at a faster pace than those of the town overall. While the data cannot conclusively prove home prices would not have risen more without the announcement, we believe it offers strong evidence that the proposal of the center did not have a meaningfully negative impact on home sale prices. However, it should be emphasized that the analysis considered only the announcement of the proposal and as such does not take into account property value impacts post-development, when any negative impacts of the projects would be observed more acutely by property owners and prospective home buyers.



### Applied Economic Research

CBRE characterizes AER's peer review of the Trimont study as, "the properties examined are likely comparable." In fact, AER "find[s] this analysis to be overly generic. It does not fully reference the specific characteristics of the Logistics proposal in Hudson. The study does not analyze the Hudson site and examine the relationship of abutting and neighborhood properties to the proposed development and the mitigation measures being proposed (berm, sound wall, etc.). There is no indication the analyst reviewed the various Hudson-specific impact studies (traffic, noise, air quality, visual etc.) prepared by the developer's consultants or the peer review thereof and their property value implications. There is little analysis of the selected comparable sites and how they compare to the Hudson setting (screening, topography, housing supply and demand, prior land use, existing neighborhood traffic, etc.)." AER has further criticisms of the Trimont study, as described above.

CBRE states, "According to the AER reports, there is no property in the state that is exactly comparable to the Hudson development. So, the properties that were analyzed in these studies by Trimont and Mr. Reeks are the closest that any existing property can be. Both in-state and out-of-state properties had trends related to residential home values that were found to be agreeable, and the conclusions drawn from them support the new development." While the first sentence is a fairly accurate, if simplified, characterization of AER's reviews, the succeeding sentences reflect the views of CBRE, not of AER.

The next paragraph is also unclear as to whose views are being presented. CBRE states, "[AER's] report further points out that the Hudson neighborhoods go against the trends of communities that are targeted for development mostly having depressed market values for homes; they are actually rising in value." This was AER's response to Wiley's study of Atlanta presented in the Trimont report. However, the next, bulleted sentences reflect the views and conclusions of CBRE, not of AER.

### Other White Paper Findings Presented by CBRE

CBRE provides brief excerpts from three white papers dated from 1958 to 1970. The excerpts address the general impacts of industrial parks on the local community and do not examine their effects on neighboring property values, nor the effects of distribution centers in particular. The most specific benefits cited are an increase and stabilization of property taxes, with minimal consumption of public services, and "the stimulating effect they have on the local economy," such as through added jobs and wages.

One paper cited, by William Shenkel in 1969, claimed that industrial parks provide "benefits due to higher personal incomes from new jobs and higher wages." While this may have been true 50-plus years ago when industrial parks featured a greater mix of well-paying manufacturing jobs, Bureau of Labor Statistics data show the average wage for the Warehousing and Storage industry in Hillsborough County, New Hampshire, was \$46,795 in 2020 versus a countywide average wage of \$70,226.

### Improvements created from Community Feedback

The report documents improvements created by GFI Partners from community feedback. While the types of measures discussed would reasonably be expected to mitigate adverse impacts to neighboring



properties, we have not independently assessed these improvements and therefore cannot conclude whether they are sufficient to prevent adverse impacts to neighboring property values.

## Literature Review

As part of the peer review of the reports by Rogers and CBRE, Camoin Associates also conducted a brief review of the literature on the effects of industrial sites on neighboring residential property values. The studies summarized below examine the effects of proximity to existing industrial sites, increased traffic from commercial or industrial development, and visibility of commercial or industrial sites from residential neighborhoods.

A 2011 article by Friso de Vor and Henri de Groot in *Regional Studies*, "The Impact of Industrial Sites on Residential Property Values," used a hedonic pricing model to evaluate the effect of proximity to industrial sites on residential property values in the Netherlands. The industrial sites analyzed consisted of 60% "miscellaneous," 18% "sea harbor," 10% "heavy industry," and 4% each "high tech" and "transport." Home values accounted for differences in month sold, structural characteristics (square footage and volume, age, detached vs. semi-detached vs. terraced vs. apartment, and the presence of central heating, a garage, and a garden), and neighborhood characteristics (population density, minority population share, and proximity to jobs, highways, and railway stations). The authors conclude that "our results clearly show that the presence of an industrial site has a statistically significant negative effect on the value of residential properties: housing prices rise with increasing distance to its nearest industrial site." As the analysis is based on all types of industrial sites, it is not clear how well the results would hold for warehouse sites specifically. Also, the analysis does not examine the effects of the construction of a new industrial site on the value of existing adjacent homes, but rather the effects of proximity to existing industrial sites. Considering the conclusions of Thibeault noted above regarding the importance of site-specific factors, it may be difficult to apply the results of a more general analysis such as de Vor and de Groot's to a specific project.

A 2010 article in the *Southwestern Economic Review* by Recai Aydin, Evert Crawford, and Barton A. Smith reviews the literature on the effect on home prices of "potentially negative neighborhood effects, including close proximity to non-conforming land uses." While they cite a 1980 *Journal of Urban Economics* paper by Grether and Mieszkowski to claim that "proximity to industrial land uses is almost universally found to have a deleterious effect," they also note that "One reason past empirical research has produced mixed results is that they have typically failed to recognize the extremely localized character of the impact." With respect to the additional truck trips that the proposed distribution center would generate, a 1992 *Journal of Regional Science* paper by Hughes and Sirmans "found that traffic generated by commercial activity only produced negative home value impact if it directly involved an increase in traffic intensity on the streets on which the homes were located. On the other hand, increased traffic on major neighborhood arteries appeared to have no measurable impact upon home values. Thus, size and distance do seem to be an important factor in affecting potential impact." The proposed distribution



center will be at least partially hidden by trees, berms, and fences. A 2002 *Land Economics* article by Paterson and Boyle found that “visibility of [commercial] development significantly detracts from property values.’ That is, the development appeared to be a neutral attribute as long as it could not be seen from residential properties. This finding suggests that land use conflicts might be ameliorated by the use of buffers and that negative externalities are typically a ‘next door’ phenomenon where now ‘next door’ has a specific meaning – the non-conforming land use must be seen from the residential property in question.”

### Works Cited

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- Paterson, Robert W. and Kevin J. Boyle. 2002. “Out of Sight, Out of Mind? Using GIS to Incorporate Visibility in Hedonic Property Value Models.” *Land Economics* 78 (3): 417–425.